FINAL
MARE ISLAND NAVAL SHIPYARD
Restoration Advisory Board (RAB) Meeting Minutes

HELD THURSDAY, March 30, 2017

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINS) held its regular meeting on Thursday, March 30, 2017, at the Mare Island Conference Center, 375 G Street, Vallejo, California. The meeting started at 7:07 p.m. and adjourned at 9:15 p.m. These minutes contain a transcript of the discussions and presentations from the RAB Meeting.

RAB Community Members in Attendance:

- Myrna Hayes (Community Co-Chair)
- Paula Tygielski

RAB Navy, Developers, Regulatory, and Other Agency Members in Attendance:

- Janet Lear (Navy Co-Chair)
- Nick Shih (Navy Remedial Project Manager)
- Valerie Harris (Navy Lead Remedial Project Manager)
- Bonnie Chin (Navy Remedial Project Manager)
- Elizabeth Wells (RWQCB)
- Neal Siler (Lennar Mare Island)
- Erin Hanford (City of Vallejo)
- Gavin McCreary (DTSC)
- Horus Nelson (Lennar Mare Island)
- Sheila Roebuck (Lennar Mare Island)

Community Guests in Attendance:

- Stephen Hallett
- Boudicca Todi
- Carol Phillips
- Dave Shipley

RAB Support from Construction Engineering Services, LLC, in Attendance:

- Doug Bielskis (CES)
- Doris M. Bailey (Stenographer)
- Wally Neville (Audio/Visual Support)

I. WELCOME AND INTRODUCTIONS (Myrna Hayes [Community Co-Chair] and Janet Lear [Navy Co-Chair])

CO-CHAIR LEAR: Okay. Well, let's go ahead and get started.

Welcome everyone to the Mare Island Restoration Advisory Board meeting. And we start the meeting with introductions. My name is Janet Lear. I'm the Navy co-chair.

CO-CHAIR HAYES: I thought she was going to say we start the meeting with prayer. I'm Myrna Hayes, and I'm the community co-chair, and I live in Vallejo. And this meeting, since we're not having a meeting in April, this meeting is mine and Paula's -- if she gets here -- 23rd

year meeting anniversary. Yeah. Yeah. So we know where all the bones are buried. Okay. You guys aren't laughing, huh.

MS. HARRIS: I'm Valerie Harris. I'm the Lead Remedial Project Manager for the Navy.

MR. SILER: Neal Siler, Lennar Mare Island.

MS. HANFORD: Erin Hanford, City of Vallejo.

MR. MCCREARY: I'm Gavin McCreary with the Department of Toxic Substances Control.

MS. WELLS: Elizabeth Wells with the San Francisco Bay Regional Water Quality Control Board.

MR. SHIH: Nicholas Shih, Remedial Project Manager with the Navy.

MS. CHIN: Bonnie Chin.

MR. SHIPLEY: Dave Shipley, just a resident.

MR. NELSON: Horus Nelson, Lennar Mare Island.

MS. ROEBUCK: Sheila Roebuck, Lennar Mare Island.

MR. BIELSKIS: Doug Bielskis, CES, Navy contractor.

MR. HALLETT: Stephen Hallett with Supervisor Monica Brown.

CO-CHAIR LEAR: Before we start with the first presentation I wanted to introduce Bonnie Chin. She is the new Navy contractor RPM. She's taking over some of the projects that were left vacant by Adam when he left. And so she's picking those up and moving them forward. So we're happy to have her.

CO-CHAIR HAYES: You can't use acronyms because we have these people

CO-CHAIR LEAR: Okay. Remedial Project Manager. Is that the only one that I used? That's the term that we refer to project managers, the employees that manage our cleanup projects for the Navy.

So our first presentation will be given by one of those Navy Remedial Project Managers, his name is Nick Shih, and his presentation is Remedial Investigation at Unexploded Ordnance Site Three, Dredge Pond 3E, and Northern Marine Corps Firing Range.

II. PRESENTATION (Nick Shih [Navy]) *Remedial Investigation at Unexploded Ordnance (UXO) Site 3—Dredge Pond 3E and Northern Marine Corps Firing Range*

MR. SHIH: Thanks, Janet. Good evening, everyone. Tonight's Navy presentation is about the Remedial Investigation that we will be conducting at the Unexploded Ordnance site 3, also known as UXO 3 which is comprised of two areas, the Dredge Pond 3E and the Northern Marine Corps Firing Range.

Tonight's presentation topics will cover where the site is on Mare Island and how it was used by the Navy, why the site is of interest, why there's a need to conduct an environmental investigation there, how we are going to conduct our investigation, and some delays and project challenges that we've encountered.

In September 2012, we gave a very similar presentation to the RAB about conducting a Remedial Investigation at Unexploded Ordnance Site 3, UXO 3. However, we encountered some obstacles resulting in some delays, and we wanted to update the RAB about what happened and how we resolved these issues.

We will also discuss the project schedule and upcoming fieldwork.

The site is located on the north end of Mare Island. The north is this direction. It's west of Azuar Drive. Azuar Drive is right here. And it's behind the industrial buildings on the north, including the Alcoa facility and Earthquake Protection Systems. So it's in the backyard of those areas.

Here's a zoomed in aerial photo that shows the two areas of the site and landmarks nearby for your orientation. Dredge Pond 3E is outlined in white.

And the Northern Marine Corps Firing Range covers an area both inside and adjacent to -- or inside the dredge pond and adjacent to the dredge pond.

I'll show more detailed slides later that show the investigation boundary after we talk a little bit more about site description and history.

Currently there are no plans to develop these areas as the site is designated as future open space in the Mare Island specific plan.

So let's talk more about these areas individually. First, Dredge Pond 3E. From the early 1900's to the early 1990's, the Navy conducted dredging operations from Mare Island Strait and deposited the dredge sediments into a system of twelve dredge ponds on the western portion of Mare Island. We are investigating one of those ponds, pond 3E.

The sediments from Mare Island Strait were transported across the island by the pipeline, and were discharged into the pond at this outfall location, as you can see here in green.

It was constructed in 1931 and used until 1948. It's about 46 acres in size.

And in some previous investigations at some Mare Island dredging outfall locations, there have been found scrap metal, discarded munitions, and small radiological items like deck markers.

It's important to note also, as part of the site story of the dredge pond, that when the dredge ponds were in use and they reached their capacity, they would let the material dry out, and then they would actually push some of the material to the side to build up levees around the dredge pond so that they could get more capacity to fit into the dredge pond.

So what you currently have left is a rectangular flat-bottomed pond with these six to seven feet high levees which are around the pond, which is about anywhere from ten to twenty feet wide, big enough for people to drive on.

Approximately thirteen acres of the dredge pond -- in this little rectangle here -- was actually previously transferred to the City of Vallejo as part of the Western Early Transfer, and are not part of this investigation. And that's demarcated by this survey line that shows where the Western Early Transfer Parcel ends, the property line. And it's called the Joy Survey Line, named after the person who actually did the survey.

CO-CHAIR HAYES: Can you explain -- it's a little bit confusing because why would you be doing just a partial investigation? And had you done a complete investigation of the area west of the Joy Survey Line before you transferred it to the City?

MR. SHIH: So there will be some upcoming slides that discuss the previous investigations. In the late 1990s, following when Mare Island closed and started the Base Realignment and Closure process, these large swaths of land on the western portion of Mare Island were investigated as part of that Western Early Transfer. And then not only were those investigated in that portion of Mare Island, but also all of the dredge pond systems in general.

So that's the preliminary information that we have for our portion of the property that remains. However, those other portions that had already been transferred, like the Western Early Transfer Parcel, were previously investigated by the City of Vallejo and their contractors.

CO-CHAIR HAYES: So Weston basically just made a purple line out there and they went right up to the little teeth marks at the purple line and they stopped?

MR. SHIH: Well, I wouldn't say that Weston made the line, I would say --

CO-CHAIR HAYES: Well, they were the early transfer proponents with the City, so --

MR. SHIH: So, yes, their investigation actually included that part.

CO-CHAIR HAYES: So you have actual survey markers that show where you start and they stopped.

MR. SHIH: We will. Those are in legal descriptions that are recorded, so we can use that description to find our property line, our property boundary, the investigation area.

The second area of UXO or Unexploded Ordnance Site 3 is the Northern Marine Corps Firing Range. Which, as the name suggests, was a rifle and pistol range used by the Marine Corps for target practice. It was used between 1917 and 1940. Some of the firing lines here are shown in yellow.

The short range rifle and pistol range is called the M-367 target berm, and the long range target that was in the dredge pond was actually the 1,000 yard target berm where they would stand in these locations and shoot farther away.

Both impact berms have been leveled so you can't actually see hills out there or the berms out there right now, but we have previous investigations and historical information that shows us, you know, their location so that we can go find them for our investigation.

I thought this would be an interesting visual aid to provide. This is one of those pieces of historical information that we have about the area. It shows the target berm out in the dredge pond. It actually shows in your handouts -- and you need to be able to read that -- the M-367 target berm, as well as some of the layouts of the firing range that comprise the Marine Corps Rifle Range.

Here's the Building 505 and the USGS field office for reference.

So taking into account the historical information that we have, and the transfer parcel information that Myrna discussed, we have come up with our site boundaries for the investigation.

The Dredge Pond 3E investigation area is in green, right here, outlined.

And then the Northern Marine Corps Firing Range area is this polygon here that encompasses both north adjacent, or rather I should say east adjacent property and into the dredge pond. So these two sites comprise UXO 3 or Unexploded Ordnance Site 3.

Preliminary investigations in the late nineties and early 2000's, which I had referenced before, of the larger dredge pond system and the Western Early Transfer Parcel areas have found chemical contaminants, an inert ordnance item, and five radiological items. So we know that these are the types of things that we should be focusing on and looking for at Dredge Pond 3E.

So we have this historical information, we have the results of previous investigations, and these are the initial elements that start to frame a story of our site and lead us down the path of what we need to look for to complete the story, what we call our conceptual site model.

So how are we going to investigate for these contaminants, and determine their extent, and if they present a risk or a hazard to human health and the environment?

Well, first we have to come up with a plan that the Navy and the State of California can agree upon, which we did back in 2012, actually in 2013 we had a Final Work Plan that was approved by the agencies. But since then, we needed to update that plan because we had new personnel, new procedures, some updates in regulatory levels and guidance.

And we did that with a Supplemental Work Plan. So we took the Final Work Plan from 2013, revised it with new information, and submitted it recently, in February of this year.

We also worked with the State and the U.S. Fish and Wildlife Service to incorporate more information in our Environmental Protection Plan, which detailed our approach for protection of natural resources. And I'll discuss this more in detail some of the later slides when we talk about project challenges.

So what is the plan? What are the technical elements of our planned approach for the investigation?

The first element is geophysical survey. So to look for material potentially presenting an explosive hazard, like munitions, we will be conducting a geophysical survey using electromagnetic detecting and mapping instrumentation mounted on this pull cart.

This slide shows a picture of the cart as well as an example of typical figure output after the data is processed.

So the geophysicist can take this output and determine whether or not there are any metallic anomalies of interest based on the findings from the instrumentation. The blue areas are where there were no metallic features found. And then when you get into the red or purple areas, that's when you start to note that there are things of interest that we may need to go back, look at, excavate, and sample around.

CO-CHAIR HAYES: How deep can this instrument detect? And how deep are you required by this work plan to search?

MR. SHIH: Well, reliably we know that the instrument can usually see between two and approximately three feet below the ground surface. And I think we reference back to the conceptual site model of what's left on the dredge pond bottom, or what was discharged into the dredge pond bottom was pushed up along to the sides of the levees, so most of our area of

interest is focusing on a hundred percent survey of the surrounding levees and those hillsides of those levees to determine whether or not anything was pushed to the sides and remains there.

And then we also -- which I'll talk about more later -- are using this approach where we're going in and digging test pits down to four feet below ground surface, both in the levees and in the bottom of the pond to see if there are items that are there, basically either driven by the geophysical survey or probabilistic approach of where we think there might be things present.

CO-CHAIR HAYES: What tows that array?

MR. SHIH: A man, human labor.

CO-CHAIR HAYES: Is that man or woman?

MR. SHIH: Or woman, right.

CO-CHAIR HAYES: Going to -- or mule -- going to go out and collect data consistently on the pond berms as well?

MR. SHIH: Yes. Yes. Yes.

CO-CHAIR HAYES: As well as the bottom?

MR. SHIH: Yes. We actually did a pilot test. Before we finalized the work plan and we went out and we had somebody pull that around the pond bottom areas as well as the slopes on the levees, and they could actually see what they needed to see even through the vegetation that was present.

CO-CHAIR HAYES: What's leading you to -- I mean this is just standard practice? They never found anything in the pond bottoms on the other surveys, so are you just going to do this just for good measure?

MR. SHIH: Yeah. We need to do this to evaluate the site.. There were actually items found at some other outfall areas.

CO-CHAIR HAYES: Yeah, but that's at outfalls, I just said pond bottoms.

MR. SHIH: Right. So --

CO-CHAIR HAYES: That's different.

MR. SHIH: In a future figure we'll actually show the area -- which is this one. And so this is the outfall location, and this whole radius of what we're looking for is on the pond bottom. If anything was discharged at the outfall it would have stayed close to that area because it was heavy in nature. We will try to find any of those items.

CO-CHAIR LEAR: But we're not doing the entire pond bottom.

CO-CHAIR HAYES: Oh, you're not?

MR. SHIH: No, we're not. When I say pond bottom, I'm sorry, I meant just the areas that we chose to survey on the bottom of the pond.

CO-CHAIR HAYES: So just for nomenclature, you're talking about the outfall areas is where you're going to be surveying the pond bottom?

MR. SHIH: Yes.

CO-CHAIR HAYES: And that other pilot study area is --

MR. SHIH: That's where we tested our equipment --

CO-CHAIR HAYES: Oh, right.

MR. SHIH: -- to make sure that it would work.

CO-CHAIR HAYES: So the only pond bottom that you're a hundred percent surveying is at the outfall?

MR. SHIH: Well, here, actually this whole green area --

CO-CHAIR HAYES: Okay.

MR. SHIH: -- is going to be a hundred percent surveyed for radiological and geophysical.

And we're getting a little bit ahead of ourselves, but also these grid locations for the Northern Marine Corps Firing Range, firing lines, and target berms, are some of these strategic areas that we selected based on previous findings. So that was the geophysical survey.

Second element was the radiological survey which was, you know, essentially very similar to the geophysical survey where we performed the survey using radiological detecting. And this time, more convenient for our field crew, it was mounted on an all-terrain vehicle.

And the instrumentation ends up processing this output after it's been processed and looked at.

And how this works is that this instrumentation will use data that's collected from a reference background area that we know doesn't have any radiological impact, and then compare that background data with the data that it collects from our area of interest to determine whether or not there's any statistically significant differences in that information so we know potentially there could be a radiological item there.

CO-CHAIR HAYES: And for those who don't know what radiological items you're looking for, and the word deck marker might not mean anything to them, can you just describe what it is and what kind of risk it poses?

MR. SHIH: Sure. So there's natural background radiation in everything. And in this particular case the Navy would use materials like luminescent paints/coatings that had radiological material in them because they would make them luminescent so that they would glow in the dark, like the dials on the instrumentation that they would have or the little buttons that would be around the ship exterior so that sailors would be able to see in the dark so they wouldn't fall off the ship.

So these types of materials have a higher radioactivity than background, and typically I think we're talking about radium and strontium, and those are the things that we are looking for.

We supplement the survey information, the radiological and geophysical survey with some of these more traditional means of drilling for soil samples and installing monitoring wells to collect groundwater samples.

Pictured here is, it's a little dark but pictured here is this limited access drill rig that can go into the pond and drill down to the depths that we need to get to collect soil samples.

Here is a traditional excavator that is going to assist us in digging test pits as well as digging out any anomalies that we find to determine whether or not those things are radiological items or discarded military munition items or ordnance items.

So as Myrna acutely pointed out, where are we going to do all this? This figure shows an aerial photo of our study area. As we talked about before, we're doing a radiological and geophysical survey, a hundred percent clearance in these areas around the pond on the levees, as well as this large radius that's around the usual outfall location where the material was discharged from here into this dredge pond.

We're also doing the geophysical and radiological survey in the Northern Marine Corps Firing Range areas where the berms are and the firing lines are on this grid system, which also coincides with where we'll be collecting soil samples.

So there's about over a hundred soil sample locations from the grid system in the Northern Marine Corps Firing Range, seventeen soil borings in the dredge pond levees and in the bottom, and thirteen test pits in and around the pond that will be dug to about four feet.

We'll collect groundwater samples from three temporary monitoring wells, and potentially some more groundwater samples if we encounter it from other soil boring throughout the site.

CO-CHAIR HAYES: Can you tell us in this case what those blue lines are around this pond and around this larger --

MR. SHIH: Yeah, so we have this --

CO-CHAIR HAYES: They're not in the legend that I can tell.

MR. SHIH: We have a number of features here in this figure. The blue lines are actually the lines that demarcate the dredge pond identification. So this blue line here that goes around is Dredge Pond 3E.

This is another pond area, 3N.

This purple line here is the Joy Survey Line that we talked about.

I think these lines are essentially denoting the levee areas.

These orange lines are other firing line areas that were used to fire into these target berms; however, like the Western Early Transfer Parcel, these are on property that's already been transferred to the City of Vallejo, so those have already been investigated.

So this slide as well as the next two slides show our sampling and analysis approach. They provide a lot of detail about what depths we'll be collecting samples, how many samples we'll be collecting, as well as some of the analysis that we'll be doing.

I provided these as a reference just in case someone wanted to know the level of detail of what we're doing as far as sample collection and depths and quantities. I won't read all of them.

Again, this is another detailed slide showing soil sampling and groundwater sampling plan.

And then all of the host of analyses that we'll be running for all of those samples that we'll be collecting.

CO-CHAIR HAYES: Why are you going to 65 feet for three of those? What do you think you're going to find there?

MR. SHIH: At 65 feet we hope to look for lithology to get a good idea of what's happening with the soil underneath the site as well as maybe what's happening with groundwater, to have a good

picture to complete the extent of what's happening at the site, since this is the first kind of investigation of the dredge pond by the Navy.

So we will have this massive amount of data that we've collected from the survey, from the sampling efforts. We're going to use it to evaluate, incorporate in our RI report. We'll show our findings in the report and update our --

CO-CHAIR HAYES: RI is an acronym, and there are people here this evening who may not know what RI means.

MR. SHIH: I apologize for that. It's remedial investigation. RI is remedial investigation.

So our evaluation of data will help us to understand the story of the site, the nature and extent of any contaminants that we find. And then we can also use that for analysis to determine if there is a risk to human health or the environment by conducting a number of risk assessments, a human health risk assessment, ecological risk assessment, radiological risk assessment, and then the munitions hazard assessment. And based on the results of those, we can use that to make recommendations on what the next step in the process will be.

So for some of the long-time RAB members, possibly those that have been around for twenty-some years, the presentation may seem very familiar as the Navy presented this very same topic in 2012 in anticipation of conducting the Remedial Investigation work that summer in 2013. The presentation was given by my predecessor, Reggie Paulding, if anybody remembers.

As I've said before, we've encountered some challenges since then that have resulted in delay of the work, and we wanted to update the RAB on why that was and how we've overcome these challenges.

So the first challenge is associated with endangered species protection. As some may be aware, there is an endangered species present on parts of Mare Island which we must protect. This is the salt marsh harvest mouse pictured here. Its habitat is vegetation that's also pictured here, commonly known as pickleweed.

CO-CHAIR HAYES: I'm just going to say something about salt marsh harvest mouse. The reason it's federally listed as endangered is simply because of its decline in habitat in San Francisco Bay, as we've lost 95 percent of our tidal wetlands, and its meal is basically pickleweed. It looks like a regular mouse right here, but picture it the size of your thumb, and a tail one-third longer than the house mouse that you just got in your trap at home. So that's how to identify them in the field should you ever stumble across one.

And they -- people might wonder why they're, why they matter -- you know, we're busy trapping and killing everything we can get our paws on at home -- but why these guys are listed and protected. And it's because there are so few individuals left, and Mare Island provides, or at least one time before its habitat was degraded by things like stormwater run-off being put into its habitat, it provided a significant amount of pickleweed habitat for this little critter. And you might care about it some day when we've run out of fresh water, because they're the only land mammal that can drink or survive on salt water.

MR. SHIH: Thank you, Myrna. So pickleweed is present throughout the dredge pond bottom. In 2013 our planning documents were finalized with the standard biological avoidance approach at the time to remove pickleweed by hand from our work areas prior to our work to ensure that the salt marsh harvest mouse was not present before we did anything.

Unfortunately, the Navy encountered issues with the level of effort involved in such a large area that we wanted to study, that we had to revisit avoidance measures with the California Department of Fish and Wildlife and the United States Fish and Wildlife Service on how we can more efficiently conduct the vegetation clearance work to get the investigation done.

So for this case, this specific case in which the dredge pond area is so large, and in the interest of completing the investigation to determine potential impacts to human health and the environment, the California Department of Fish and Wildlife and the United States Fish and Wildlife Service, after much discussion and including an equipment pilot test, has allowed us to use mechanical means to remove pickleweed provided we take a number of precautions.

So you'll see a picture in here, we have these motorized weed whackers that we will be using on the flat surfaces.

And we have this articulating arm tractor mounted mower that we'll be using that can ride along the top of the levees and help us to cut some of the vegetation on the slopes.

So we can use those under three major, major conditions.

One, a California Department of Fish and Wildlife and United States Fish and Wildlife Service approved biologist must preinspect all of our work areas before we do the work, and then actively monitor ahead of the equipment while we're using it.

Number two. We have to cut down the pickleweed using multiple passes and cutting in increments. So, you know, we have to go cut one swath at a certain vegetation height, then come back and cut it again down at another height. And so essentially this is giving the mice an opportunity to escape.

And we eventually cut it down to about three inches above ground surface, a height at which it's so low that it is not attractive for the salt marsh harvest mouse to want to be there, and it also provides us with the ability to see all the way through to the ground to make sure that it is not there when we clear the area and conduct our work.

We also have to cut in a direct -- the third condition is that we have to move in a direction that lets the mouse escape to habitat.

So if you can remember the figure that I had showed you, you know, we have to essentially use the tractor as well as deploy our weed whackers. And it would be the tractor first, and then the weed whacker, so that we can move in a direction that allows the mouse to go into these areas that we won't be in.

And then once we do our clearance activities, these hash marks are essentially denoting a fence that we'll install after we've done this vegetation clearance so that they don't come back into our work area for the time period that we're doing the work.

So the other major challenges are seasonal challenges. We need to conduct the work when it's dry, ideally in the summer when there's no water in the bottom of the pond, and when the pond isn't soft and muddy so we can actually get our equipment down there to do its work.

But in the summer it's the nesting bird season.

So if a nest is established and has eggs in our work area or near our work area, we can't disturb that nest until those eggs hatch and the fledglings leave.

This issue is compounded by the fact that our site is really attractive to birds because there's nobody out there, there's no vehicles that drive out there, and there's really not a lot of people that walk out there.

It's also actually next to the U.S. Fish and Wildlife Service sanctuary.

So what do we do? So in anticipation of trying to do the work in the summer, this summer, we went out in December, the winter, which is outside of the nesting season, and we cleared vegetation, primarily fennel and bushes on the tops of the levees surrounding the dredge pond. So by doing that we created this buffer around the site to deter nesting birds from being in those areas for the upcoming spring and summer.

Here's a picture of what that looks like on the levee tops that were cleared in December. And you'll see we created this 10 to 25 foot wide buffer space on our site perimeter. So we're trying to avoid having nesting birds in these areas around the site. And we don't really anticipate a lot of the nesting birds to be present within the pickleweed areas.

So in the summer we hope to return, have easier access to the site, have minimal nesting bird avoidance issues, and then we can proceed with the pickleweed clearance down the levee slopes and into the pond bottom to avoid the salt marsh harvest mouse, and actually be able to conduct our investigation work after that.

However, we received a lot more rain than we anticipated this year. This is a photo of Dredge Pond 3E with the water actually reaching the top of the levees, which are about six to seven feet high.

So we have upwards of ten million gallons, based on some of our projections, of water that's currently in Dredge Pond 3E. And so we're trying to debate whether or not this water will be gone by the summer or late summer or before the next wet season happens; or whether or not the Navy can do something about moving some of this water to facilitate it being gone and the rest of it evaporating so that we can do our work.

So this highlights the point that despite our best planning efforts to try to move the project forward and do things, ultimately some forces are out of our control, and we have to adapt accordingly.

It's my hope -- it's our hope that my next presentation to the RAB will be a success story about how we overcame this obstacle, and got out in the summer. And, you know, the next presentation I give is about, you know, what we did to overcome this and the actual results of the investigation.

CO-CHAIR HAYES: I might say that that is a seasonal wetland and that is protected. It's designated as such by the Army Corps of Engineers. And it is wetland and upland refugia, basically for storm events for birds to get in off of the open bay. So it serves a really critical purpose in the bay to have these ponds sitting around full of water. But, yeah, not going to work too well for you.

MR. SHIH: Right. At some point we have to investigate the area.

So upcoming schedule and milestones. We hope to finalize our Supplemental Work Plan by early summer, 2017, right before we get out and actually do our remedial investigation fieldwork this summer hopefully.

And then, you know, after all that information is collected, process the data and submit a Remedial Investigation Report in the spring of the following year.

So tonight's topics, we talked about site location, where it is on Mare Island.

Described the background and history of the Unexploded Ordnance Site Three.

We talked about the remedial investigation objectives and our approach.

Some of the delays and project challenges that we're trying to overcome.

And the upcoming schedule.

That concludes the Navy's presentation for this evening. So if anyone has any questions, I'd love to hear them.

MS. PHILLIPS: I would just like to ask a question. I'm a real newcomer out here.

MR. SHIH: Welcome.

MS. PHILLIPS: But why would you want to disturb radioactive ground if you know that they have hidden things in there, munitions and things?

MR. SHIH: Well, it's not necessary --

CO-CHAIR HAYES: Can you repeat the question to make sure that everybody heard that?

MR. SHIH: Okay. Sure. So the question, if I understand it correctly, is why would we disturb the ground and conduct this investigation if we know that radioactive material may be there?

CO-CHAIR HAYES: And munitions she also mentioned.

MR. SHIH: And munitions. So first, it's the Navy's obligation to determine whether or not anything that we've done on Mare Island or on the portions left of Mare Island that have not been transferred yet pose a risk to human health and the environment.

The radioactive items and the munitions aren't necessarily hidden, they were deposited there by operations by the Navy. We have previous investigations and historical information that shows us what types of radiological material, what types of ordnance items might have been deposited there.

We have the ability to safely go out and look for these items.

Because we also have as part of our plans a number of safety plans that are associated with doing these things, that not only we review as an internal government agency, but also the State of California, Department of Toxic Substances Control, and Water Board looks at to make sure that we're doing things properly to find out what is the story of the site? What is there? Are these things that are left behind by the Navy, you know, going to harm anybody or anything?

That is why we have to do what we're going to do. Before anybody were to use it or before, if we just leave it.

MS. WELLS: And how big are the deck markers and the buttons and the things like that that are potentially radioactive?

MR. SHIH: So the five things that have been found during investigations for Dredge Pond 3E, deck markers are a few inches in diameter. Dials, I'd say, are a little bit bigger. Short pieces of luminescent rope have also been found. So small items.

And to speak to the munitions part of it, so the firing range used small caliber arms so --

CO-CHAIR HAYES: 0.50.

MR. SHIH: Yeah, I think it's -- yeah, maybe 0.38 to 0.70, maybe a little bit smaller than that.

CO-CHAIR HAYES: Uh-huh. Uh-huh. I thought that was a great explanation, a great answer, and I don't know if that was helpful.

MS. PHILLIPS: Uh-huh.

CO-CHAIR HAYES: Also, if you're going to go investigate, you know, you don't know what you're going to find. It partly depends on the model that everybody agrees on about this piece of property. Like you have a bedroom, so you're pretty sure you're going to find a bed in it, you know, or a mat or something. You might not find the kitchen stove in the bedroom. So that's a conceptual site model in an anecdotal citizen way.

If you're going to go there and you're going to find those items that -- but there are surprises. On the south end of Mare Island they didn't expect to find, they had a site model that said we're not going to find anything bigger than, say, one pound because -- munition item because that's the biggest thing we ever found. So they got approval to have safety arcs protective areas to go clear munitions to that size, but then by great chance and good luck, because we're going to be using the property as a park in the future, they found a 300 pound World War II submarine depth charge buried in the ground. So that blew the site model right out of the water. So that item got removed.

So my point on that story is that if you're going to go out and learn what's there, you might as well go ahead and clean it up, cause that's going to make everybody happy, from the State and federal regulators to Nick to be able to sleep at night. And it's going to make whoever manages the land in the future a lot happier too, you know.

One of the favorite things people come and ask me as I manage the Mare Island preserve on the Navy's former ammunition depot is if they can come out and metal detect. And I always think, wow, I'm really working with a bright bulb today. Because it just doesn't seem like a good idea in an ammunition facility.

But, so do you kind of get it that this will reduce the risk of exposure to munition items or radiological items for the public or for a construction worker or a U.S. Fish and Wildlife Service employee counting birds one day? And it will also make it a better place for that little salt marsh harvest mouse to live.

Does that help a little bit too?

MS. PHILLIPS: Yeah.

MR. SHIH: Thank you for adding to that. Thank you very much.

CO-CHAIR LEAR: Thank you, Nick.

III. PRESENTATION (Sheila Roebuck [Lennar Mare Island]) *Building 84 Status Update, Investigation Area D-1.3*

CO-CHAIR LEAR: Our next presentation will be given by Sheila Roebuck with Lennar Mare Island. She's going to be giving us a Building 84 Status Update. And Building 84 is located in Investigation Area D-1.3.

MS. ROEBUCK: Hello, everyone. I am back for the third time to give an update -- well, actually Neal gave the first update on Building 84 in 2008. I came back in 2011 and gave an update. And then I had some subsequent discussions with Myrna in 2014.

So some people may already be aware of some of the conditions in Building 84 and 84A, but I'm going to go through those for the people that may not be as familiar.

And Building 84 and 84A, I'm going to talk about basically its setting, where it's located.

Give you a little bit of background about what we've done in the past.

And then for the building which we refer to where it says B84 and 84A, that just means Building 84 and 84A. The newest information is building materials sampling that we've done recently, and I'll give you some background on that.

And then I will talk about what we expect the path forward will be.

So Building 84 and 84A are located in Investigation Area D1.3-Central. So it's right here. Other parts of D1.3 are D1.3-South and then D1.3-North, which is the success center that's closed. So all the blue areas are ones where the environmental cleanup is complete.

This just gives you another perspective. Again, this is where Building 84 is located. And it just helps you to see the other activity on Mare Island.

And Building 84 and 84A are located squarely in the middle of an area planned for residential reuse.

This is the current view of Building 84 and 84A. And just so you know, Building 84 is this brick portion. The 84A portion is the concrete part. And this is located -- I don't know how many people may have been out there -- but it is on Flagship Drive.

It's -- Building 84 and 84A is the old Navy brig. The first construction was in 1895, and successive additions to Building 84 were in 1900 and 1901.

And Building 84A, which is the concrete section, was built in 1909, 1939, and later.

As I mentioned, Building 84 is the brick part. And the adjoining 84A is the concrete. Both are notable resources to be retained in the specific plan for Mare Island. And as I mentioned, the area where they're located is residential.

This is just --

CO-CHAIR HAYES: If I could just note that this term “notable resources” isn't really a National Park Service term, it's a Lennar Mare Island term, the City of Vallejo and they kind of concocted. So these buildings are also in the listing of the National Register of Historic Places.

MS. ROEBUCK: They're within the historic district. The notable resource term is in the specific plan.

CO-CHAIR HAYES: Right, that was developed by Lennar and the City.

MS. ROEBUCK: Right.

CO-CHAIR HAYES: So it doesn't have -- it's not a nomenclature that is standardized across the nation under the National Historic Registered Districts or anything like that. It's just -- just to be clear, this building is part of an additional, or a National Park Service designated district. So this just is a local little nomenclature that was invented.

MS. ROEBUCK: It also -- there are certain rules associated with the various kinds of buildings that we have. And so if you're interested, those are described in the Specific Plan, and it's, I think it's in Appendix B.

The other thing I wanted to point out is I'm going to try not to use acronyms, but if I do there's a list in the very back of the presentation that defines those.

CO-CHAIR HAYES: And I don't know how much more you're going to say about the building's history, but it's an incredibly historic building. Just saying it's the brig, it's one of two Navy brigs in the nation, I think the other one's in Rhode Island.

MS. ROEBUCK: I think it's in Portsmouth.

CO-CHAIR HAYES: And this is kind of like the Alcatraz of the Navy. It's where a pretty criminal element that ended up being in the Navy ended up serving time. And it's a pretty rich history, and a very, very important building in Navy history.

And, for example, if -- there are people who are buried in the cemetery at Mare Island who, you know, were found committed suicide in this building. And not that that's, you know, of tremendous historical significance, but there was also stories of people who had been in this brig that if they were on your vessel you'd better watch your back, because they were a pretty good criminal element coming out of the brig as well as for the reasons they got in there.

So if you can imagine the building being equal to, in its significance, to Alcatraz, that might give you a better idea of what we're talking about here. Because all of these buildings on Mare Island just tend to glom together and just look like old buildings.

MS. ROEBUCK: Okay. Building 84 has a number of environmental issues that have been identified, and most of which have been addressed and closed out.

Those include lead-based paint in soil, which was along the western wall of the exterior of 84A. That has been remediated and closed out. There were underground storage tanks. Those also have been remediated, and that issue has been closed out by the regulatory agencies.

One fuel oil pipeline also closed out.

There was black granular material which was a concern because of its association with lead. And that was excavated. And that issue has been resolved as well.

There were three PCB sites that had been identified. One was assessment location one. The "AL" just means that the site was known at the time of transfer.

There was unknown location, labelled "O1" which means that was not known at the time of transfer, it was discovered later. And quite a bit later than that there was a site in the mezzanine portion which is the second floor part in this part of Building 84. All of those have been closed out. The solid media have been remediated, and the DTSC and U.S. EPA have confirmed that they meet residential standards.

So that's not the end of the story with the PCBs, but it is the end of the story for this presentation on the other issues. So from now on we'll just talk about the PCB issues, because that's the one issue that's been difficult for us to resolve.

This shows a timeline of what we've done with respect to PCBs, which are polychlorinated biphenyls. They were associated largely with transformers. We now know that there were also

PCBs that were used in other building materials like paints and caulk. And we'll talk about that as we go on.

But the, the reason I wanted you to see this, this is sampling that's been undertaken at Building 84 from about 1995 until 2017. So we're over twenty years of trying to resolve issues at this building.

We've done a number of remediation events, as you can see here. And again, you know, we're doing our best to try to resolve these issues, and we're continuing to do that, as you'll see, as we go forward. The issue with Building 84 has been that indoor air has had PCB concentrations in five sampling events that you'll see here that have exceeded regulatory criteria for both residential and commercial reuse.

The updated regulatory criteria listed here for unrestricted or residential reuse, that's 4.9 nanograms per cubic meter of air. The commercial/industrial standard is 21. And you'll see we don't meet either of those.

So that has been the problem. Each time we've done remediation we've taken air samples with the hope that the samples would come into an acceptable range, which they haven't.

CO-CHAIR HAYES: Are those -- why -- that first one back in 2004 shows 21.

MS. ROEBUCK: Right. At that -- the standard has just in 2016 come down to 21, it was --

CO-CHAIR HAYES: But 2004 you have a sample level of 21; right?

MS. ROEBUCK: Right. Right. But we've never ever been able to repeat that in the following sample events that we've done over the next six years. I'm just framing it. This is just what we know now.

So what I mentioned before was that the solid media do meet residential standards for the PCB sites that had been identified previously.

What we did at the time was a risk evaluation to see if maybe from a risk perspective the indoor air would be acceptable. And what DTSC likes to see is a one in a million or one times ten to the minus six excess cancer risk number.

What we have from the residential standpoint is one in a hundred thousand to four in a hundred thousand, which is not acceptable. And for the commercial/industrial reuse it's two in a million up to seven in a million. That was our estimate. So neither of those meet the standards that DTSC generally requests.

So the history. In 2009 our contractor at the time was CH2M Hill, and they told us they were concerned about whether we could meet the regulatory standard for indoor air because with each successive remediation event we hadn't gotten to where we needed to be. So we considered demolition of the building at that time.

And I want to make it clear that it's not our desire to demolish any historic building, but it is our obligation to provide a building that's safe. And so our feeling is and was that if it can't be safe, we can't offer the building.

So we talked to the City and to the State Historic Preservation Office and to the Architectural Heritage and Landmarks Commission in the 2009-2010 time frame, and at that time we hadn't completed remediation of the mezzanine site. And the State Historic Preservation Office said

there's no mitigation for demolition, please go back, do all of the remediation you can. And then if you can't achieve what you're trying to from a risk perspective, please do an environmental impact review so that you know what all the potential options and concerns are through that process.

We continued the remediation of the mezzanine site. When that was done we asked DTSC what our options were. And what they said is the solid materials all meet regulatory standards, but the indoor air doesn't, so you can't use it for residential purposes.

MR. SHIPLEY: A question. So are you doing sampling outside the building to make sure nothing in the environment is floating in?

MS. ROEBUCK: We did. And in the air results that I showed before you'll see that the outdoor samples were well below the regulatory standards that we were looking for. But it's a good question and something that we thought we needed to look at as well.

So the next thing that we did was we were talking to the City about this for a long time about what our options were. And one of the things that we considered again was demolition because we didn't know what else we could do to clean up the building.

And so we submitted in late June a Certificate of Appropriateness which is, again, a Specific Plan-related requirement that you can't demolish any notable resource without this approval of a COA, or a Certificate of Appropriateness. And so we submitted that.

And the very next month EPA established -- or published guidance that said that building materials with PCBs can cause indoor air problems. And they found that out because, you may have read in the paper, that there were PCBs at very high levels in schools in Malibu. And there was significant concern about that, and study of it. And as a result, they published this guidance.

In December of 2015 we went back to the Architectural Heritage and Landmarks Commission to present to them planning and environmental information and historic information about the building. And that was part of the standard, you know, Certificate of Appropriateness process.

The AHLC was very much against demolishing the building, and really wanted anything possible to be done to save the building.

And as part of the whole process, the environmental impact report process would begin through a notice of preparation of an environmental impact report or an EIR. Part of that involves having, you know, regulatory agencies and others review the notice of preparation and comment on it.

And when DTSC reviewed that, they, in January of 2016 said, you should sample building materials and see if there are PCBs associated with them.

And so what Lennar Mare Island did was we contracted with a consulting company, Geosyntek, to help us look at this. And they created a Work Plan for sampling building materials. And the Work Plan was approved by USEPA and DTSC in September of 2016.

And the intent in the Work Plan was to do a screening level sampling event. First of all, for the building materials that included paint, caulk, insulation, things like that, that were not the brick or the concrete, but what covered it. And if we found contamination in those materials, then go back and look at the concrete or brick behind it, because what had been found in Malibu was that especially with things like caulk, but also with paint, that it could cause PCBs to be transferred to those materials.

MS. TYGIELSKI: To this material?

MS. ROEBUCK: Yeah. So we did sample that. And we found PCBs in paint with a little bit in caulk. But there's not much caulk in Building 84. I was surprised at how little there was. But what we found is that there are PCBs in excess of the residential standard in virtually every area of the building. And that it's mostly paint. The concentrations aren't super high compared to something like Malibu. I mean, in Malibu some of the caulk had concentrations of 500,000 parts per million.

CO-CHAIR HAYES: Holy crap.

MS. ROEBUCK: And for us, I'll show you -- I gave you a larger map -- and you can sort of go through. And you can basically see that we did find, as I mentioned, we did find PCBs in the paints. And what, on this figure, if you look at it, anything that you see in pink is either in excess of the residential standard of 0.22 milligrams per kilogram, or there was a detection limit that was in excess of that number, so you have to assume that that's basically a detection.

So you can see there are pink numbers throughout the building. They're not high. I mean, the highest that we had was 60 parts per million. But it's still -- that's still three orders of magnitude higher than we're allowed to have in a residential setting.

So we took that information and we went to the places that had the highest concentration of PCBs in the paint, and we sampled the concrete behind it, because the highest concentrations happened to be in areas where there was concrete. And we did that at two depths, zero to half an inch, and then half an inch to one inch. And we did that in areas where we had PCBs in excess of ten parts per million or milligrams per kilogram.

And in those locations what we found is that we did see PCBs in excess of the regulatory standard at the zero to one-half inch level. There were no detections at the one-half to one inch level. And so that's what we know. That's the new information that we have.

CO-CHAIR HAYES: So this was painted concrete? All the concrete was painted that you sampled?

MS. ROEBUCK: You know, it's even more than that, Myrna. It's concrete, it's brick, it's the ceiling, it's the wooden trusses, it's everything.

And there are places in the building, particularly in this -- this part of the building, and there's a lot of this gray paint, and it is all over the ceiling, all over the wooden supports. And if you look in this, the older Building 84 portion, there are sometimes three different colors of paint on top of the brick, and then the supports will have another color of paint. So it's pervasive.

CO-CHAIR HAYES: But the concrete I had specifically asked about the concrete because you said that at those deeper levels that it didn't, it wasn't there. So it wasn't like added to the concrete mix, so it's --

MS. ROEBUCK: No, we don't have any indication of that.

CO-CHAIR HAYES: So it's been applied by or through or has gotten into the concrete at those half inch depths by, through paint.

MS. ROEBUCK: That's our assumption.

CO-CHAIR HAYES: Concrete being painted.

MS. ROEBUCK: Yeah, that's our assumptions. So, like I said, that's the new information that we have. And so what we have here, you can see that there were 28 samples that we have collected. And that's not a lot of samples for a 36,000 square foot building. So really this was a screening level survey that, to answer the question, does it look like we have a problem with this in this building? And the answer is yes, it does look like we have a problem with this in this building.

As I said, you know, it's not like 500,000 parts per million like they had in Malibu, thank goodness, but it's still something that we need to address.

CO-CHAIR HAYES: What did they do in Malibu? Did they do encapsulation or a removal or did they tear the building down?

MS. ROEBUCK: I think they would like them to tear the building down but, so far, I don't think have done that. But they have removed windows and have had to remove --

CO-CHAIR HAYES: Oh, the caulking in the windows, that's right.

MS. ROEBUCK: A foot of material next to the windows because it was so contaminated, as a result, I assume, of the caulk. But they're still working on it.

But interestingly, in Malibu and in the EPA guidance, they allow fifty parts per million. And that was surprising to me when I thought, okay, these are little children. But you think they're probably in the school for a couple of years, and they're only there for six or eight hours a day. So the exposure period is much lower.

CO-CHAIR HAYES: Different than a resident.

MS. ROEBUCK: So I'm just assuming that's why the numbers are different.

MS. TYGIELSKI: It's different than living in the building, yeah.

MS. ROEBUCK: It is. So we have talked to DTSC and USEPA, and we are using the standards that we have always used which is 0.22 milligrams per kilogram.

MS. TYGIELSKI: I have a question. Is it possible --

CO-CHAIR HAYES: Paula, can you use your microphone?

MS. TYGIELSKI: Is it possible to spray with a sealant?

CO-CHAIR HAYES: Yeah, epoxy.

MS. ROEBUCK: I don't know the answer to that in terms of its long-term efficacy. Or if it would be sufficiently protective that people would feel like it was an okay thing.

But from Lennar Mare Island's perspective, we have always taken the position that residential reuse should not require those kinds of, you know, cover-over fixes. So it's certainly not something that we would prefer, especially given that the technology for dealing with this seems pretty new.

So our initial thoughts are, you know, maybe we should sandblast the whole building on the interior. And we are talking to our contractor about that. What we don't want to do is create enormous amounts of waste in the process of trying to clean it up. And we haven't made any decisions about that. We're still exploring.

CO-CHAIR HAYES: Do you have to use sand or can you use dry ice, something less abrasive?

MS. ROEBUCK: You can use CO_2, I believe.

CO-CHAIR HAYES: Yeah.

MS. ROEBUCK: But as I said, we're still looking into it. We've only started talking to remediation contractors last week. So I just don't have that information yet. But because this is a building that is as important to the community as Myrna described, I want -- I think we wanted to provide you with the information that we had so far.

CO-CHAIR HAYES: And you could -- and you could still consider a commercial option. I know that when you and I met about this -- and I appreciate you coming and talking with me about it, and it certainly informed me tremendously -- I know you said that you got this because the Architectural Heritage and Landmarks Commission requested that you do this, that you went out and did some commercial, analysis of potential commercial use of the property. And if I recall right you said that your consultant said, oh, great building, however, you know, gosh, if you had a Trader Joe's they'd be bringing trucks in early in the morning and that wouldn't work because this is in the center, the core of a residential area. And, oh, well, if you had a pharmacy they wouldn't have enough foot traffic, they wouldn't have enough traffic.

Well, those are pretty limited -- those are retail commercial. And I don't -- I didn't recall that you talked with me about anymore broad commercial like actual office buildings or, you know, environmental education center for the North Bay for the two million people that don't currently have one that we've worked for 21 years plus to try to get on the island. That sort of thing. Or a museum.

MS. TYGIELSKI: A museum.

CO-CHAIR HAYES: An art museum type thing or whatever. I didn't see that you considered that. And that seems to me like a direction that you might go. Something that was compatible and attractive. Maybe some type of retail space that served that very large residential area that you're investing in, and not try to reach those residential numbers. Seems like something that I'd be interested in seeing more information about.

MS. ROEBUCK: Elizabeth.

MS. WELLS: I'm not going to address that comment, but back to the question about the sealant. So at the other base that I work at, which is Moffett Field in Mountain View, as you may know there's a giant hangar there, and the siding was all removed because it was contaminated with PCBs, and the use of the hangar was ceased because, nobody could go in because of the dust had PCBs. And the paint that was used to paint all of the structural steel also had PCBs in it.

And so the remedy that was chosen was encapsulation. And so it was all sealed over. And the reason why I wanted to bring that up is if Lennar goes in and does some sort of sealing, the waste remains in place, and there's going to be five year reviews, and there has to be maintenance. And if you have people living there you have to go into their space and you have to do inspections and that kind of thing, and so that's very intrusive and invasive and would probably not be something that Lennar would be interested in.

But since that happened, the encapsulation and everything happened, the hangar has been leased by NASA to Planetary Ventures, also known as Google and they are actually starting a pilot study, probably in the next three weeks, where they're going to try three different technologies to

remove the paint, the contaminated paint that has the PCBs in it. And they're looking at sandblasting, vapor blasting, and water blasting.

And what they're -- so Lennar may be interested in looking at that. If anybody else wants to I can, you can send me an e-mail or call me. But they've chosen a very small area of the hangar where they're going, they were completely encapsulating it, and then they're going to do these -- they're going to do material testing, both material testing, and then they're going to do wipe sampling and all this blasting and how much waste they make and that kind of thing.

CO-CHAIR HAYES: Question back there.

MR. SHIPLEY: I guess I'm getting kind of curious, are there no products out there that can leach the PCB back out of concrete, or just using heat, something that will drive it out of the concrete?

MS. ROEBUCK: There is a paste that has been used in Florida, and I think that was at a -- I want to say that's NASA too, but I'm not absolutely sure. It was a military facility or a government facility. And it requires the use of solvents. So that's not something that, you know, is without its own problems.

But there are other technologies that have been begun. I understand with that if you have high concentrations you might have to have multiple applications.

CO-CHAIR HAYES: I was just thinking, you know, there's been such high concentrations accumulated in caulk, you know, maybe just -- I had a contractor for a brief time who had a person on their team on my house, and she used to say, "Well, we'll just caulk the shit out of it." So I'm just thinking maybe you just "caulk the shit out of it" and then peel it off and then off will come the PCBs.

MS. TODI: Since the mic is back here I'm going to take it for a public comment moment. Todi, homeowner, Vallejo. I'm a history nut, went to Waterloo, you know.

And I'm hearing so many excellent threads of conversation here and putting it together. You didn't mention recreational, you just said commercial and residential. Recreational, you know, a locker room full of bikes and the guys outside in a healthy hut or something, that kind of thing.

You have so much area to put in residential, couldn't this be siloed in some way until the Google technology, the master of all, solves it kind of thing, and some kind of future use scenario.

Because food is definitely a must. I mean this whole area is a food desert. All my friends who own homes over here are just crazy trying to find a grocery store.

MS. ROEBUCK: I understand. When I referred to residential and commercial, those are the standards that we compare against, there isn't a recreational standard that we compare against, that's the reason for those references.

With respect to mothballing it and waiting, that is something we've considered. And as far as retail or other commercial options, I think we have tried to look at those things, and to do that with consultants that are as independent and dispassionate about it as possible.

And so far there wasn't a solution that was acceptable from a standpoint of being self-sustaining or fitting in or having, as you mentioned, Myrna, the right foot traffic to make it a successful business.

But I don't think we're closed to various options. I think at this point we're at the point that we know we have a problem for residential reuse, we know we're going to try to look at our options to allow that use, but we're at the point now that we're looking at remediation.

We have no idea how much it's going to cost. We've been told by USEPA that if we are going to reuse it for residential we have to use this subpart O requirement to verify that the work was done properly, which means gridding the building; walls, ceilings, floors.

So not to say that any of that won't work, we don't know. We're looking at it, and as we look at it we'll, you know, see where it leads us. But I think we're trying hard to address the problem and not preclude, you know, a reuse that will work.

CO-CHAIR HAYES: So what you're saying is -- well, first of all, I think that when we talked, you know, there was a big concern that I imagine still continues with Lennar Mare Island, and that is where you're going to get those five acres of residential that you penciled in your project costs and the outcomes with. And so that's an issue that hopefully you can address. It's a big island and hopefully you can find five acres some place that could work for that.

I guess I wasn't clear that you were, had considered, you know, some innovative kinds of retail. But the two illustrations that I'm recalling seemed just, you know, kind of old-fashioned, you know. And they didn't seem like they would fit within that neighborhood footprint.

Maybe you should just think about selling it to Google -- yeah, project number two. No.

But I'm happy to hear that you would entertain some other types of uses and including mothballing. I think that the town is eager, of course, to not see everything mothballed or destroyed, which is kind of looking like -- or painted gray and with black trim. It's all getting to be rather hideous and horrifying.

And so it's feeling like that's the direction that Lennar's going is just sort of, you know, people are kind of frightened by, ooh, here's yet another building sitting there for a hundred years, boy, I could think of great ideas to do with that building, but they don't see the tremendous cost.

And I can see that when you're talking about gridding, when the Navy gridded off buildings to do sampling of all the buildings they suspected might have radiological contamination, they spent $130 million doing the surveys. In some cases they took down a building cause the mezzanine was saturated, wooden mezzanine, and it was cheaper to take it down by far than it was to try to remediate. But for the most part that was the cost of gridding and of surveying. So that's no small amount of money.

And I'm with you there, that if that's the route you had to go, then, you know, I'd just take the boards off and let people go play in it and just call it a loss. And certainly you could take that property's intractability and incompatibility as a loss, I would assume, if you could make it safe enough to go, to go play in, you know, which is, I guess, another option.

MS. ROEBUCK: I think that --

MS. TYGIELSKI: Laser tag.

CO-CHAIR HAYES: Hmmm?

MS. TYGIELSKI: Laser tag.

CO-CHAIR HAYES: Yeah, thank you.

MS. ROEBUCK: The environmental impact report process is part of that whole "consider what all of your other options are." So that was stalled, that, because we're not looking at the demolition alternative until we know what the remediation options are. So we're, now we're in the collect-more-information stage, and when we do that we'll come back and give you information.

Yes.

MR. SHIPLEY: One other kind of dumb question. But the brick part of the building was built after the earthquake in Mare Island. So does it have any sort of earthquake survival --

MS. ROEBUCK: The brick part of the building began --

CO-CHAIR HAYES: So it was before.

MS. ROEBUCK: -- to be built in 1895.

CO-CHAIR HAYES: And the Mare Island earthquake was 1898.

MR. SHIPLEY: Was it '98?

CO-CHAIR HAYES: Yeah.

MR. SHIPLEY: Okay.

MS. ROEBUCK: So it has not seismically retrofitted, but it has so far withstood the earthquakes that we've had.

MR. SHIPLEY: If it would withstand that 1898 earthquake, it would withstand anything.

CO-CHAIR HAYES: I must say that I really appreciated your tour that you gave me, and I hope that since it's come back to us for an update -- which I really, really appreciate, I know I kind of, you know, was constantly saying something about Building 84 until we got you back here -- I appreciate and value your presentations. They're believable to me and I think you really are working hard on this site.

I really would love for us on our next tour or at some point to see the inside of the building. It's -- I think it's the most amazing space. And I think that you might find in this community, because you get the perception that what this community does is fights tooth and nail against something; but you never, often we're not given the chance to fight tooth and nail for something. And I think that our creative juices are often stifled by the Kremlin across the water, and just always having to fight against the silliness.

And I think that if you put a wonderful group of people together in the room, like the mayor did after the liquefied national gas tanker terminal debacle -- he put 35 people in this room together, and we developed a remarkable plan for the reuse of the south end of Mare Island. And we've implemented a portion of that for ten years now in the Mare Island Shoreline Heritage Preserve.

And I think that you might underestimate this community by a long shot because you've been at those more formal bodies and those more, you know, the process that just is, is a governmental process.

I would just encourage you to see what other options might be -- might be possible. And I'm not talking about reuse within the context of environmental cleanup, but if you could get to a commercial standard rather than residential, maybe there is something that would be compatible

with residential and get everybody where they want to be with this building. That's a goal for certain.

MS. ROEBUCK: Nick.

MR. SHIH: So I'm assuming the building is secured and enclosed so people can't actually go there and look at it and look at the interior.

MS. ROEBUCK: That's right, it's locked. The interior is without lights, there's no power there. The entire floor of Building 84 and the north-south training portion of 84A have the entire floors removed, and it's not easy walking. And there are vandals that occasionally will knock the doors down and, you know, try to come in and, you know, graffiti tag walls and things. But it's not a place for people to casually walk through.

MR. SHIH: Thank you.

CO-CHAIR HAYES: Well, on the other hand we have the power of video and simulation and virtuality, and I bet you could put together a really good tour without anybody ever having to set foot in it.

MS. ROEBUCK: Okay. Questions? We've been talking a lot. I should have put that on before.

All right. Thank you.

CO-CHAIR LEAR: Thank you, Sheila. It was excellent.

IV. FIRST PUBLIC COMMENT PERIOD

So we are now at the first public comment period. Do we have any other public comments?

(No response.)

CO-CHAIR LEAR: No. Ten minute break.

(Thereupon there was a brief recess.)

V. ADMINISTRATIVE BUSINESS (Myrna Hayes [Community Co-Chair] and Janet Lear [Navy Co-Chair])

CO-CHAIR LEAR: We are at administrative business. So meeting minutes, if you would get any comments you might have from the January meeting minutes to myself or Myrna.

VI. FOCUS GROUPS REPORTS

And now focus group reports. And Erin has requested to go first. So City report.

a) City of Vallejo (Erin Hanford [City of Vallejo])

MS. HANFORD: Hello. This is Erin Hanford from the City of Vallejo.

Just in case folks have not seen the press release on the City of Vallejo's website, the electric car manufacturer, Faraday Futures, had to pull out of the exclusive right to negotiate. That just happened just a couple of days ago, last week.

And it wasn't that they didn't like the site, they just are going to concentrate on their Nevada location. And they still find the north Mare Island site very exciting, and so do we.

So the City will be taking another look at north Mare Island and gathering our resources and marketing the site.

We have a new economic development manager that just joined us last week, and he and I and our staff will be marketing that site.

More to come.

MR. SHIPLEY: Quick question I just have to ask.

MS. HANFORD: Yes.

MR. SHIPLEY: So is there anything in the north Mare Island that would preclude it from being mixed use residential versus industrial?

MS. HANFORD: My understanding is that the cleanup was not to residential standards, it was to light industrial as, in accordance to a Specific Plan for Mare Island. When the Navy does the cleanup they're using a Specific Plan as their guidance of how they're cleaning up certain areas; is that right?

(Thereupon there was simultaneous discussion.)

MS. HANFORD: No, I meant just that the cleanup was not done to residential standards.

CO-CHAIR LEAR: It depends on the area. I think some portions of north Mare Island, they were no further action sites, so they didn't have any restrictions against residential. But it's been so long I would have to do some research.

MS. HANFORD: I mean, we're following our zoning which is really the Specific Plan, and that was -- the zoning for that site was light industrial, meaning office and industrial and manufacturing, light industrial and manufacturing. But it's a good question.

MR. SHIPLEY: And I make this plug all the time; that site is the same size as the New Orleans French quarter, you could use the same grid, sell 500 plus lots at a hundred thousand each.

CO-CHAIR HAYES: And it has something else that's in common with the New Orleans French quarter.

MS. TODI: It's sinking.

CO-CHAIR HAYES: It's sinking.

MR. SHIPLEY: That hasn't been a problem in New Orleans.

CO-CHAIR HAYES: Well, it was, we called it Katrina.

MR. SHIPLEY: Not where the French quarter was.

CO-CHAIR HAYES: Well, not where the French quarter was because that was special, but that's a political issue.

Quite frankly, if you've taken a look at north Mare Island after the rains, you'll find that one of the biggest challenges for the redevelopment of it is the reality around its infrastructure requirements prior to ever putting a little design on a napkin in the bar, let alone taking your first shovel of dirt out. It is probably best -- I mean you've heard it here because these are court reported minutes, I'll say it again -- it's probably, if we're going to be as smart as the Netherlands

about Mare Island, we're going to think about what can we let go back to the sea? What part can we buttress against sea level rising and insane storm events like we've been having?

We had the exit closed for days, if not weeks, off of Highway 37 for a reason, it was flooded. And so you really have to question who's going to come and build either residential or a car manufacturing facility at a, on a piece of property that probably should just go back to mother nature and be a water park or something like that, if you must.

So it's just, you know, the fact is that we can do all the environmental cleanup we want, and we can get it all ready to roll, but it will have to be a really deep-pocketed developer who has the funding and wishes to do that kind of infrastructure upgrade before they ever put a penny into their development. And it's just a -- it's just a fact.

I mean, I've seen now, what, something like 18 exclusive rights to develop in the 23 years that, or 21 years that Paula and I have served on this Board. So, you know, it's just a challenging piece of property. Unless you're going to do it underground, under sea world of some kind. That's my opinion.

MR. SHIPLEY: I'll challenge you on that some time.

CO-CHAIR HAYES: Okay.

MS. TODI: Todi speaking. All the practicalities of sea level rise architecture and reclaimed by Mother Nature; you said that you do have that information about what was cleaned at what parcels, is that available on-line so the public can see? That's my question. Or can it be made like scans and PDF's or something so that we can understand when we're meeting with our City leaders?

And then, as part of your marketing effort like, you know, going out to Google -- I'm just using them as the big word, all right. Let's pick a real company that we'd like. Amgen. Going to Amgen and holding outside a sign, "Come to Vallejo," does that make sense? Can the public have input on where you're doing a call for proposals and marketing?

MS. HANFORD: I'm really not sure how to answer that. I wasn't here when the site was originally put out to market.

MS. TODI: Yeah.

MS. HANFORD: I was here right when Faraday appeared, and that's my experience. But I'll be finding out along the way. And it's a good question. I don't know.

MS. TODI: Even if it's targeted nights like here.

CO-CHAIR HAYES: Where would I find it on your site? Can you tell them where to find it on your site?

CO-CHAIR LEAR: There's not a single document that you could go to to easily find that information, however, DTSC has a website where a lot of documents are uploaded.

The Navy website has some documents.

A lot of the property in north Mare Island was transferred back in 2001, so I'm not sure what specific documents to point you to at this moment.

CO-CHAIR HAYES: You could also go to, the JFK library is supposed to be the federal depository library and it's supposed to maintain all the environmental cleanup records. It would be really laborious. But, you know, it isn't just --

The environmental cleanup is not just willy-nilly, it is by, not by county parcels but by cleanup parcels, just like you saw illustrated tonight. And you would be able to find those documents.

But we have tried for a million and a half years approximately to try to get an on-line interactive kind of map, and it just costs money, and nobody really wants to do it, and there's just not enough --

MS. TODI: Time.

CO-CHAIR HAYES: Yeah. Juice.

b) Technical Focus Group (Paula Tygielski)

CO-CHAIR LEAR: Okay. So technical focus group.

Paula, did you have anything to report?

MS. TYGIELSKI: No, nothing to report.

CO-CHAIR LEAR: Okay. Lennar update. We can always count on Neal.

c) Lennar Update (Neal Siler [Lennar Mare Island])

MR. SILER: Okay. So follow along with the Lennar update. You should have this eleven by seventeen figure, you can find it over here. If you don't have it we'll get one for you.

But as Sheila had mentioned during her presentation that the areas that are in blue, those are areas that have been cleaned up.

The areas that are in green on the Lennar parcels are ones that we have Remedial Action Plans together. And they're next in line to be cleaned up.

So currently there's about 66 percent of Lennar Mare Island's property that has been cleaned up. If we get the green areas cleaned up we'll be at about 75 percent.

And the only ones left are those heavily industrial areas that are in yellow that we're completing the Remedial Action Plans for, and then completing the cleanup as we move along.

But just to give you an idea of some of the things that we've been doing over the last few months.

We submitted a number of documents to the Department of Toxic Substances Control and the Water Board.

We've received comments back on seven of those documents, and concurrence on eight documents. So things are moving along.

Again, as I mentioned, what we're trying to do is close out two areas that would give us additional property that will be cleaned up; and that's Investigation Area C3, which is down by the waterfront; and then D1.3-South, if we can get that along we be about 75 percent done.

We're in the process of completing the Remedial Action Plans for two heavily industrialized areas, C-1 and C-2.

And we continue to clean up the number of different sites in those areas and move this thing along. We're getting very, very close to being done. We've completed about 555 of the 570 PCB sites.

About 103 of the 113 underground storage tank sites.

And about 115 of the 118 fuel oil pipeline segments.

So things are getting closer and closer to being done. And once we get those completed I'm sure that everybody will be very happy.

So does anybody have any questions for me at this time?

(No response.)

MR. SILER: Okay. Thank you very much.

CO-CHAIR LEAR: Thank you, Neal.

Regulatory agency update.

d) Regulatory Agency Update (Elizabeth Wells [Regional Water Quality Control Board], and Gavin McCreary [Department of Toxic Substances Control])

MS. WELLS: Okay. The San Francisco Bay Regional Water Quality Control Board, or the Regional Water Board for short, we are working with both the Navy and Lennar and my co-worker Adriana Constantinescu -- I'll spell that later if you need it -- she is working primarily with Lennar. I transferred most of the sites that I was working with Lennar to Adriana. And so she is the one that's doing all the closures and then the review, so let's give her credit for that, for Lennar.

And I continue to review documents and work with the Navy on all of the sites.

Our goal is the same as the Navy, to get the sites to completion and reuse. And we want to do it more quickly, I think, but we have a lot going on. So that's all at the Water Board unless anybody has any questions for the Water Board.

I don't know where Gavin went.

CO-CHAIR HAYES: Right there.

CO-CHAIR LEAR: Oh, there he is.

CO-CHAIR HAYES: Perfect timing.

MS. WELLS: Time for your update.

MR. MCCREARY: Okay. I am Gavin McCreary with the Department of Toxic Substances Control again. And slightly disorganized. Okay.

So one of the new things that we're looking at is tribal consultation on the sites of Mare Island. So this is a new thing. It started with Jerry Brown, Governor Jerry Brown approving Assembly Bill (AB-52) in September of 2014. It will impact quite a bit of the work out here. It's anytime there is a ground disturbance, which is a lot of our stuff.

So AB-52 requires that lead agencies begin a consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of proposed projects. There are three tribes in the area of Mare Island who potentially have interest.

The Production Manufacturing Area, IA F1 on the southeast portion of Mare Island is the current site where this work is taking place.

It starts out with the agency contacts tribes that are in the Native American Heritage Commission, rather they have the database and they are then contacted by DTSC. The list is provided to DTSC, and we send a letter out to them asking them if they have any interest in the project, at which time they will contact us and say yes, we're interested; no, we're not interested.

Some of the concerns could be the remains that are in place, religious interests, historic interest. And they, you know, go about different ways protecting the resources.

They can send somebody out for a site visit who will take a look if it's of any interest. They might want to be present on the site for excavation activities, digging activities to make sure that nothing of cultural interest is put in harm's way of our work.

I have a California Environmental Protection Agency policy memo. I just wanted to highlight a few of the points listed in it. Let's see.

"This policy provides a framework for the California Environmental Protection Agency and its boards, departments, and offices to improve and maintain effective government-to-government relationships, and engage in meaningful consultation with California Native American tribes.

This policy demonstrates the agency's commitment to obtaining information about the culture and history of California Native Americans and their environmental concerns and issues to enhance California Environmental Protection Agency's activities, policies, and decision-making processes."

And some of the guiding principles of Cal EPA are:

"To acknowledge and respect tribal sovereignty;

Recognize that all California Native American tribes represent distinct and independent governmental entities with specific beliefs, traditions, unique connections to areas of California that are their ancestral home lands;

Communicate and consult with California Native American tribes during the initial phase of decision-making processes that may affect tribal lands, people, or cultural resources;

Recognize and respect the cultural resources of California Native American tribes, whether or not the cultural resources are located on tribal lands;

Encourage collaborative efforts between California Native American tribes and federal, state, and local government entities to resolve issues of mutual concern."

And I'll leave it at that. So could I answer any questions?

MS. TODI: If there's someone working locally on historic tribal land, do they contact you? Who do they contact to get a tour and move things forward?

MR. MCCREARY: They contact DTSC. They will contact our Environmental Justice Tribal Affairs department.

MS. TODI: Okay.

MR. MCCREARY: So they'll receive a letter from us, and then have thirty days to respond to it.

MS. TODI: Thank you.

CO-CHAIR LEAR: Of interest to the Navy with this issue is the time, potentially extra time involved.

Once the project's identified by DTSC, they notify the Tribal Affairs Office. The Tribal Affairs Office of DTSC identifies the proper tribe and sends out a letter.

The tribe has thirty days to respond to that letter.

If they don't respond, the Tribal Affairs Office then makes phone calls or other outreach to get an official yay or nay.

And then if they decide they're interested in the project, then they have thirty days, I believe it was, to identify how they want to be involved. And there's probably some additional planning and meetings and such that may occur after that point to determine how the involvement moves forward.

MR. MCCREARY: Yeah, that's correct, Janet. And I just got off the phone with one of our tribal affairs representatives, and I've -- let's see. I know, of course, this is of primary interest to everyone how this is going to affect the timeline of it. And she assured me that it -- it's a very expeditious process. And they detail to the tribal governments who express interest the schedule that we have going on, and do everything that they can to make sure that it doesn't get skewed and that they can adhere to our schedule.

CO-CHAIR LEAR: It was of interest to me that this would apply to a site like Mare Island where it's Navy-created land through dredging and fill projects, and it was used by the Navy pretty continuously since the land was created, but it's just the geographic area that could create this interest. So regardless of whether it's Navy-made land or used by the Navy exclusively, it's not a factor really, it's the geographic area.

MR. MCCREARY: Well, the geographic area determines which tribes are contacted, but it's anytime the ground is disturbed.

CO-CHAIR LEAR: Right.

MR. MCCREARY: Which would include artificial fill material. And all of this information is provided to tribes. So if it's fifteen feet of artificial fill material consistently in the site where the project is going to take place, they'll have this knowledge and be able to decide if it's still going to be a concern to them or not.

CO-CHAIR HAYES: Okay.

VII. CO-CHAIRS REPORT (Myrna Hayes [Community Co-Chair] and Janet Lear [Navy Co-Chair])

CO-CHAIR LEAR: Okay. So getting kind of late so I'm not going to go through this in any great detail other than to say that both -- the Navy has two sites that are on hold in the fieldwork realm because of extra precipitation this year.

One of them is IR17 which has been backfilled, but we haven't done the asphalt paving because there's areas of saturated soil conditions that we can't get to optimal compaction. So that site will remain fenced off until we have some extended dry weather. And that J Street section there will continue to be closed.

The other site is SWMU 78 which is out in the dredge pond by Building 505. We started work there and then encountered a lot of water. So that's also on hold.

We submitted five documents and received comments or concurrence from five, on five documents over this last period.

So that's the Navy update.

Myrna.

CO-CHAIR HAYES: My update is very short in that I want to welcome the public on the weekend of April 8 and 9 to Mare Island Preserve for our ninth anniversary of being open to the public on a regular basis. We opened in April of 2008 on the second weekend.

And I also want to alert people to a webcam site that was just published or went live yesterday out of Richmond, hosted by the Golden Gate Audubon Society. I would suggest that you either go to our Facebook page where I have a link there, or go to the Golden Gate Audubon Society's website, and you can pick up the live osprey cam. That's a 24/7 double HD camera, webcam showing infrared at night of the nest site, as well as daylight viewing. And that is the first osprey webcam in San Francisco Bay.

It's a really aggressive very, very exciting project, state-of-the-art. And we missed out just because, you know, we didn't have the -- we spend too much time trying to get bad projects killed and not enough time doing really cool things here.

So it was totally supported by the City of Richmond. Yesterday's press conference was just huge. Every major press outlet, news outlet in the region was there, the city mayor, vice mayor, city manager, port manager, in a building that the city of Richmond has very cleverly funded for reuse.

And it's on the, the nest is on the whirly gig crane next to the Red Oak Victory Ship. So it's just a really cool project. I would highly recommend that you get to that cam, and also to the whole school children education program that comes with it.

We believe that it will drive visitors to our San Francisco Bay Osprey Days the last weekend in June, and will generally increase public interest in the seventeen nests -- well, minus one that was, are here in the mouth of the Napa River.

MS. TODI: Myrna, I'm unclear. Was the osprey nest in this area destroyed?

CO-CHAIR HAYES: One was destroyed, yes. Between -- according to our monitors from the Golden Gate Raptor observatory, the nest on the mill site --

MS. TODI: The Sperry Mill site?

CO-CHAIR HAYES: The Sperry Mill site was destroyed sometime between 3/16/17 and 3/25/17. And you may have seen the letter that I wrote to council regarding that, it's really unfortunate, it's unnecessary. And it's just an example of how our city could get, you know,

really ahead of the ball, but we tend to just sit back and wait until something terrible happens to take corrective measures.

So in my letter I do explain how you could remedy that from ever happening again here on Mare Island. And we are putting right now, sadly, we're putting operators in harm's way, we're saying you can't, just because we're not giving good guidance. Everybody wants to do the right thing, but they're not being given the resources and the permission to do that.

But in that case I can only say that that feels like a retaliation in some way. I see no reason whatsoever for, because the nest was there for several years in its location why that tenant, you know, that property manager suddenly decided to destroy a nest. It doesn't seem quite right.

But I think they could make it up to the birds. They are -- the birds have high fidelity to their site, they are highly committed to being nesting on their nest or close by, and so I think it could be remedied, so I'm very hopeful about that.

But it's tragic news, and it comes right at the same moment as Richmond and the Golden Gate Audubon Society come out with just a fabulous, fabulous PR piece and education tool, and we get the squished bug and their butterfly flies. It's really great. Goofy to me.

But anyway, thank you for asking that question.

MS. TODI: You bet.

VIII. SECOND PUBLIC COMMENTS PERIOD

CO-CHAIR LEAR: Okay. Last public comment period. Any further discussion?

MS. TODI: From the two members of the public tonight?

CO-CHAIR LEAR: Yeah.

MS. TODI: No.

CO-CHAIR LEAR: All right. Thanks, everyone. Drive safe and we'll see you next time.

(Thereupon the proceedings ended at 9:15 p.m.)

List of Handouts:

- Presentation Handout – Remedial Investigation at Unexploded Ordnance (UXO) Site 3 – Dredge Pond 3E and Northern Marine Corps Firing Range
- Presentation Handout – Building 84/84A Update Investigation Area D1.3-Central
- Lennar Mare Island March 2017 RAB Update
- Navy Monthly Progress Report

Attachment 1. Remedial Investigation at Unexploded Ordnance (UXO) Site 3 – Dredge Pond 3E and Northern Marine Corps Firing Range Presentation

Naval Facilities Engineering Command

BRAC PMO West

REMEDIAL INVESTIGATION AT UNEXPLODED ORDNANCE (UXO) SITE 3 – DREDGE POND 3E AND NORTHERN MARINE CORPS FIRING RANGE

Former Mare Island Naval Shipyard

March 30, 2017 Restoration Advisory Board Meeting

Nick Shih, Remedial Project Manager

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Presentation Topics

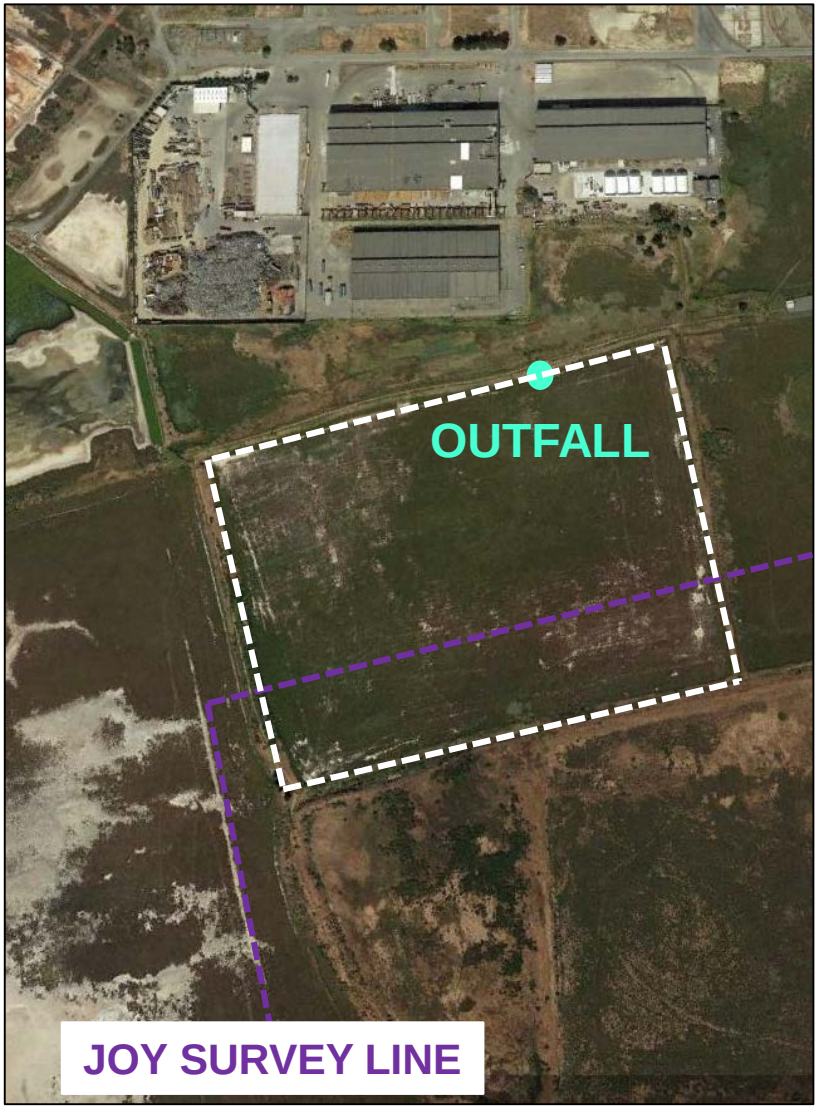
- Site Location and Description
- Remedial Investigation Objectives
- Remedial Investigation Approach
- Delays and Overcoming Project Challenges
- Schedule

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Site Location

SITE LOCATON

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Site Location

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Site Description



Dredge Pond 3E

- Dredged sediments from Mare Island Strait were transported via pipeline across the island and discharged into the pond at the outfall location.
- Constructed in 1931 and used until 1948.
- Approximately 46 acres in size;
- At some Mare Island dredging outfall locations, scrap metal, discarded munitions, and small radiological items (e.g., deck markers) have been recovered near outfall locations.
- Pond bottom sediments used to build up surrounding levees.
- Approximately 13 acres of Dredge Pond 3E were previously transferred to the City of Vallejo as part of the Western Early Transfer Parcel and are not part of this investigation.

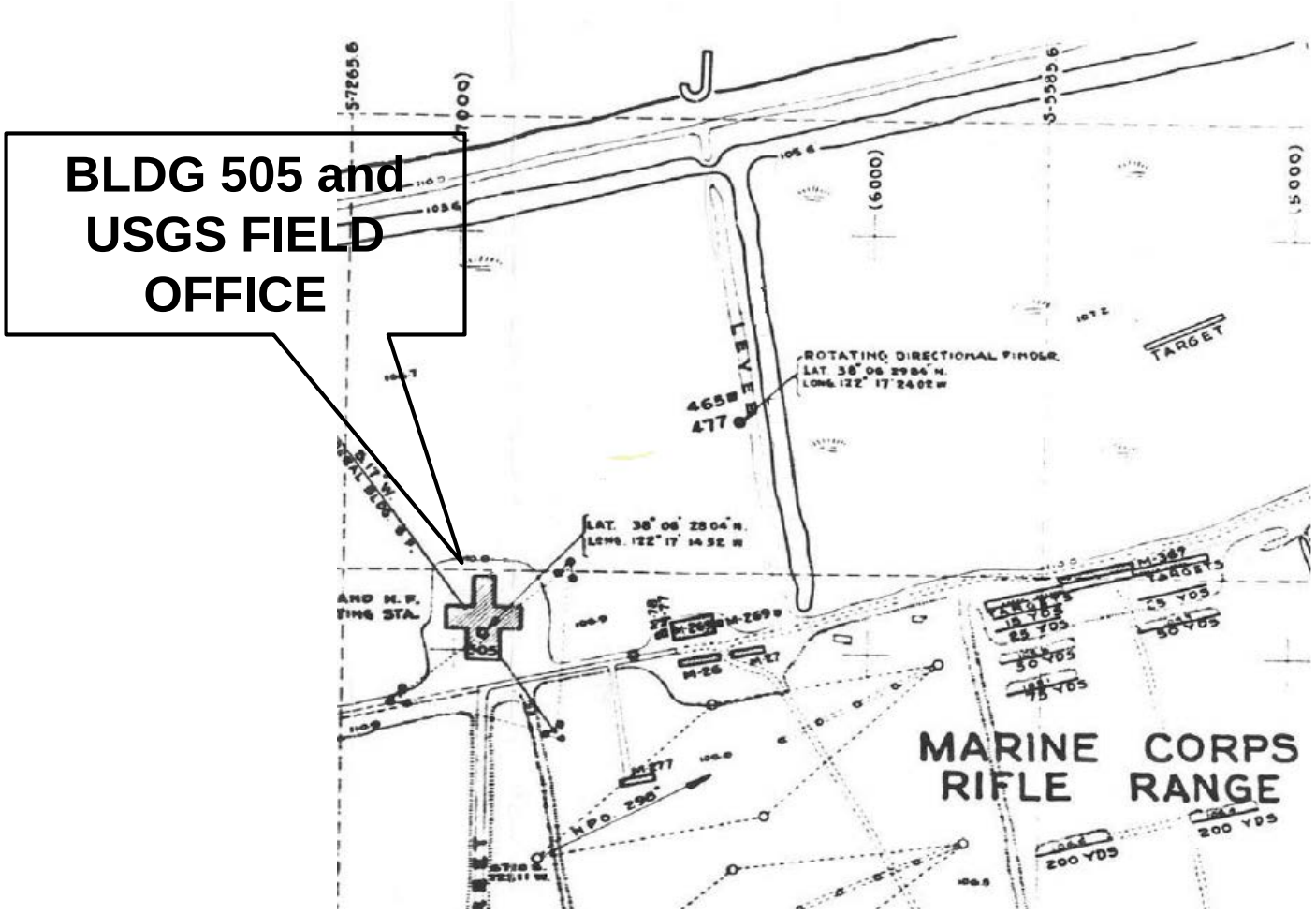
UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Site Description

Northern Marine Corps Firing Range

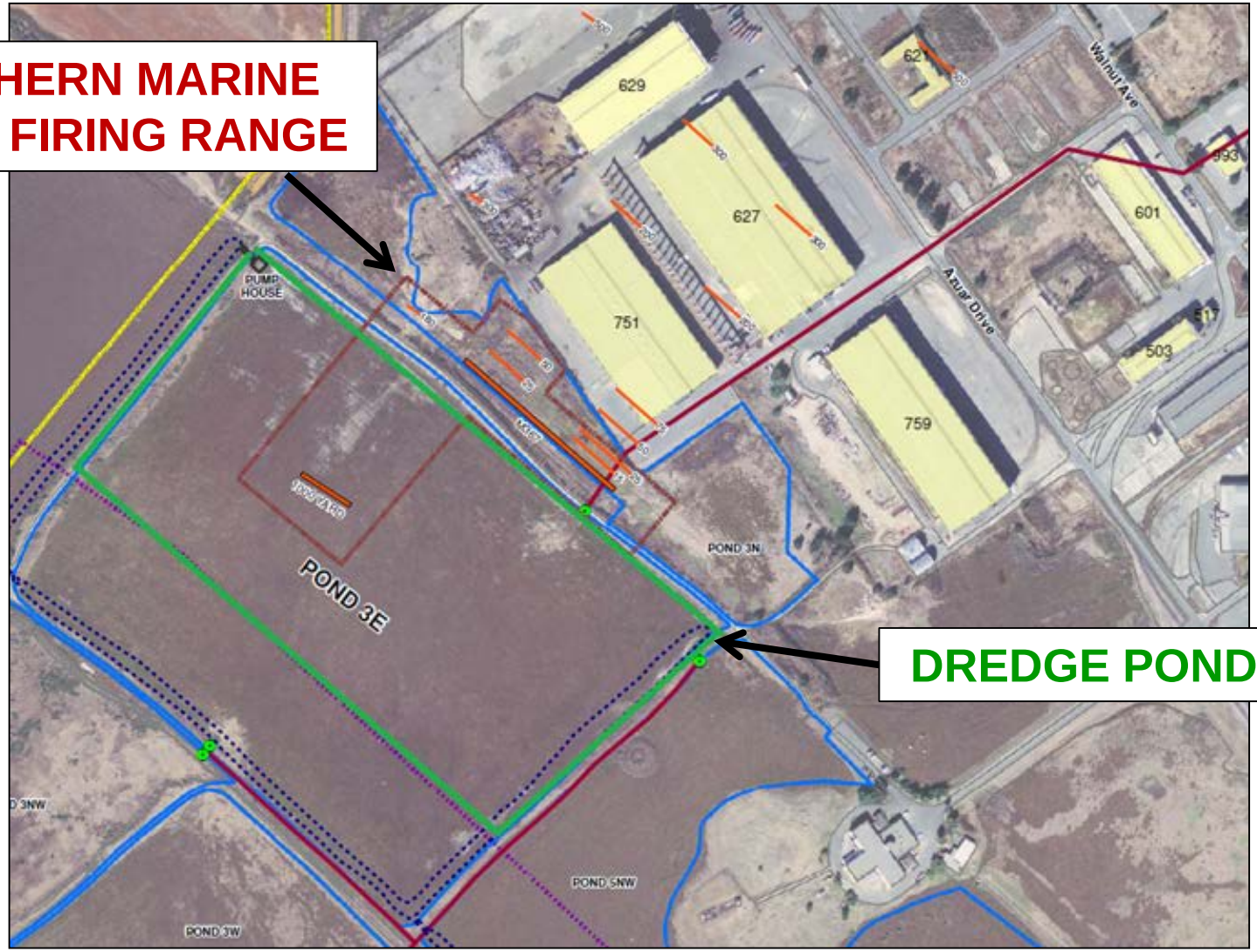
- Used between 1917 and 1940.
- Firing lines (yellow)
- Short range rifle and pistol firing into target berm M367 located just north of Dredge Pond 3E.
- Long range rifle firing into the 1,000 yard impact berm located inside of Dredge Pond 3E.
- Both impact berms have been leveled but locations are identifiable from previous investigations and mapping.

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Site Description

1939 MAP INFORMATION



UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Site Boundaries



UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Previous Investigation

- 1997 to 1999 Investigation Area I Remedial Investigation
  - –Soil and sediment sampling at Dredge Pond 3E
    - Concentrations of arsenic, petroleum hydrocarbons, pesticides, and polychlorinated biphenyls detected above screening levels
- 1997 UXO Site Investigation and 1998 to 2001 UXO Intrusive Investigation
  - –1 inert ordnance item recovered in Dredge Pond 3E
- 2000 to 2001 Radiological Survey and 2001 Radiological Excavations
  - –5 radiological items identified and recovered in Dredge Pond 3E

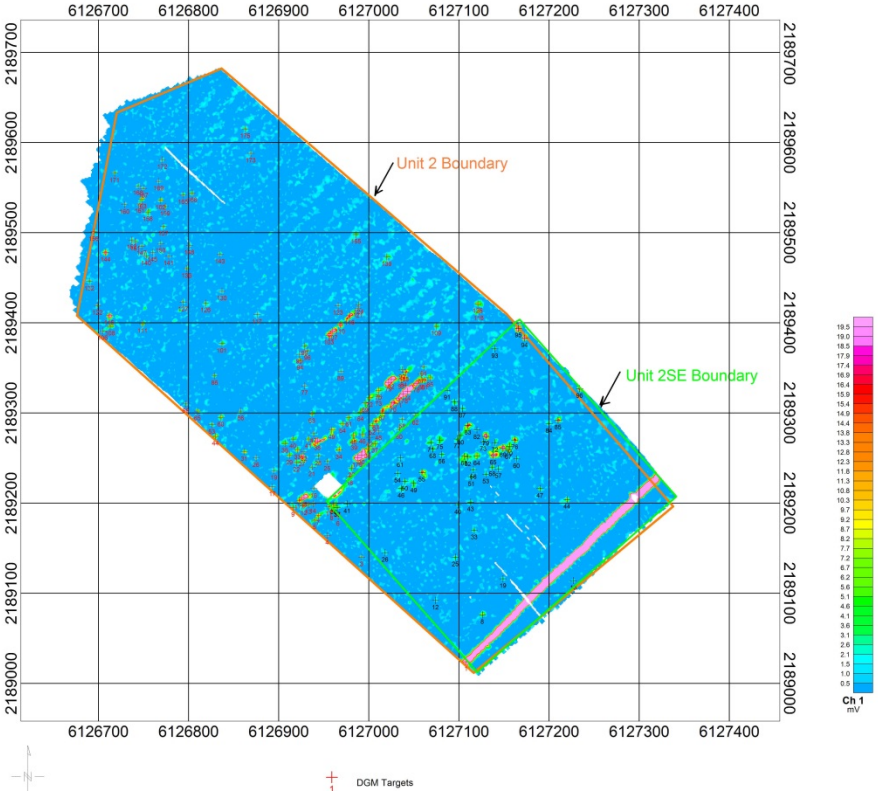
UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Planning Documents

Revise Planning Documents

- Final Work Plan, Remedial Investigation at UXO 3 – Dredge Pond 3E and Northern Marine Corps Firing Range (May 2013)
- Draft Supplemental Work Plan, Remedial Investigation at UXO 3 – Dredge Pond 3E and Northern Marine Corps Firing Range (February 2017)
- Final Environmental Protection Plan, Remedial Investigation at UXO 3 – Dredge Pond 3E and Northern Marine Corps Firing Range (March 2017)

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Surveying

GEOPHYSICAL SURVEY

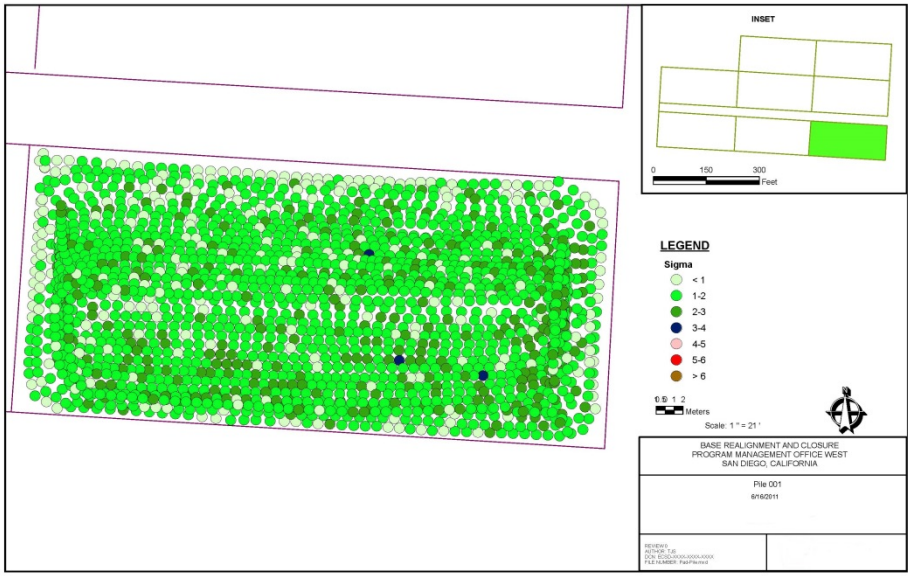


DATA COLLECTION

DATA PROCESSING

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Surveying

RADIOLOGICAL SURVEY



DATA COLLECTION

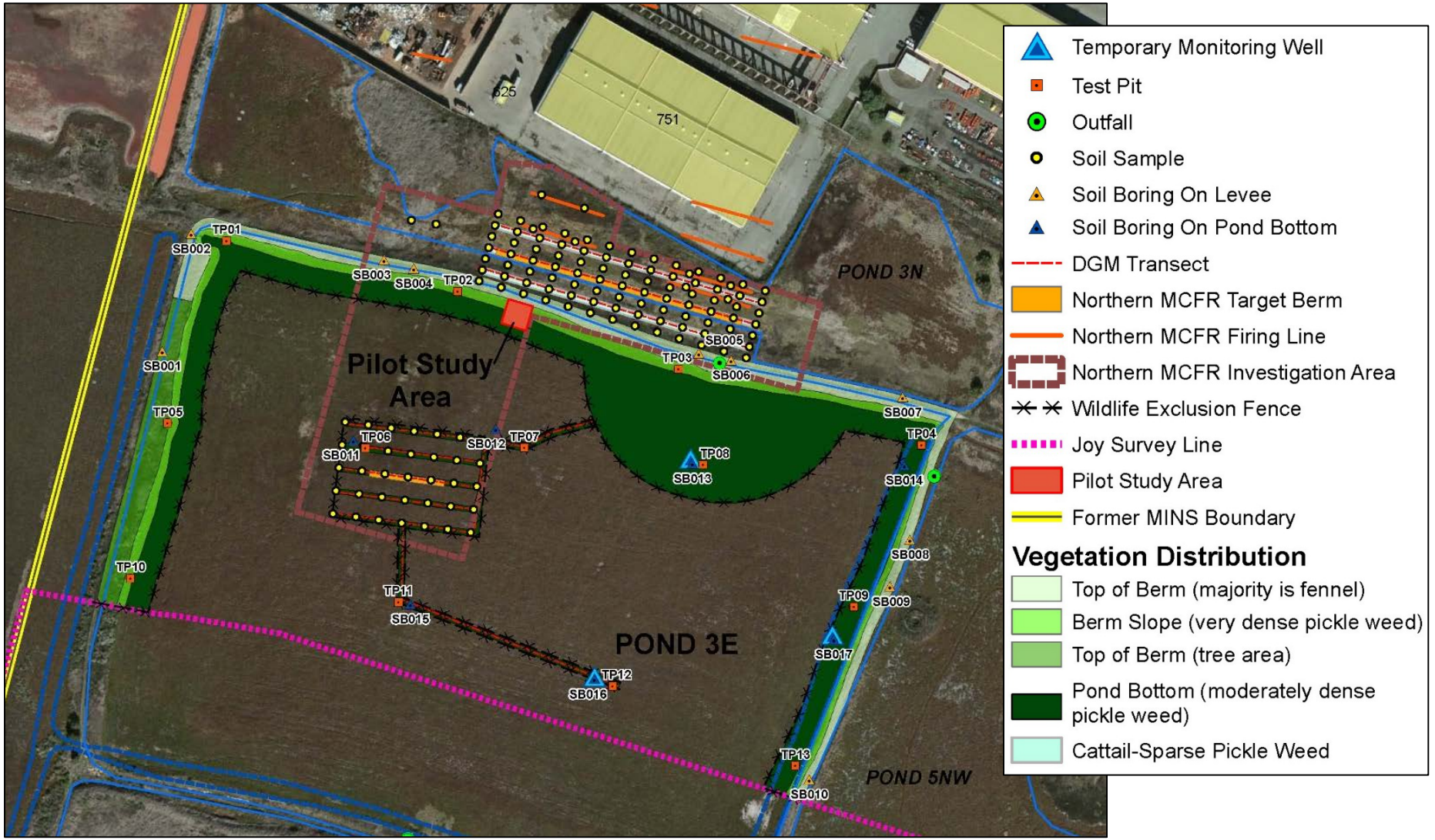
DATA PROCESSING

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Sampling

DRILLING FOR SOIL SAMPLING AND MONITORING WELLS

EXCAVATION FOR TEST PITS AND ANOMALIES

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Investigation Approach



UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Sampling

- **Soil sampling**
  - 13 test pits in and around Dredge Pond 3E
    - 4 feet deep; samples at 0, 2, and 4 feet
  - 10 soil borings along the Dredge Pond 3E levees
    - 10 feet deep; samples at 0, 2, 5, and 10 feet
  - 7 soil borings in Dredge Pond 3E bottom
    - 10 feet deep for 2; samples at 0, 2, 5, and 10 feet
    - 25 feet deep for 2; samples at 2, 5, 10, 15, 20, and 25 feet
    - 65 feet deep for 3; samples at 2, 5, 10, 15, 20, and 25 feet and drilled deeper to assess deeper lithology
  - Approximately 35 individual 50x50 foot grids at 1,000 target berm
    - Soil borings at grid nodes; samples at 0, 1, and 2 feet
  - Approximately 90 individual 50x25 foot grids at M367 target berm
    - Soil borings at grid nodes; samples at 0, 1, and 2 feet

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Sampling

- **Soil sampling (continued)**
  - Soil sampling at bottom of excavations for radiological anomalies
  - Soil sampling if Material Potentially Presenting an Explosive Hazard (MPPEH) is identified through geophysical surveying and anomaly investigation
    - Up to 25 samples
  - Additional soil sampling based on visual cues during MPPEH soil sampling
    - Up to 10 samples
- **Groundwater sampling**
  - Grab samples from first encountered groundwater at 5 borings in Dredge Pond 3E bottom (those borings advanced to 25 or 65 feet)
  - Temporary monitoring wells installed in 3 borings completed to 65 feet

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Analyses

- **Analyses**
  - Dredge Pond 3E test pit and soil boring soil samples
    - Metals, pesticides, petroleum hydrocarbons, polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), radiological constituents (Radium [Ra]-226, Strontium [Sr]-90), volatile organic compounds (VOCs)
  - Dredge Pond 3E groundwater samples
    - Explosives, metals (with hexavalent chromium), pesticides, petroleum hydrocarbons, PCBs, PAHs, radiological constituents (Ra-226, Sr-90), total dissolved solids, VOCs
  - Firing line test pit and target berm soil boring soil samples
    - Metals
  - Radiological anomaly excavations
    - Radiological constituents (Ra-226, Sr-90)
  - Geophysical anomaly excavations with identified Materials Potentially Presenting an Explosive Hazard
    - Explosives, metals
    - Potentially pesticides, petroleum hydrocarbons, PCBs, PAHs, VOCs pending field observations

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Report

UXO 3 RI Report will include the following:

- Updated Conceptual Site Model
- Results of Field Investigation
- Baseline Level Human Health Risk Assessment
- Screening Level Ecological Risk Assessment
- Radiological Risk Assessment (RESRAD)
- Munitions Hazards Assessment
- Recommendations for Future Activities

Mare Island Naval Shipyard

Remedial Investigation at Unexploded Ordnance (UXO) Site 3 - Dredge Pond 3E and Northern Marine Corps Firing Range

Presented By

Reginald Paulding, P.E.
Remedial Project Manager

September 27, 2012
Restoration Advisory Board Meeting

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Challenges

- **ENDANGERED SPECIES (SALT MARSH HARVEST MOUSE)**

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Challenges

MAY 2016

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Challenges

MOTORIZED WEED WACKERS

TRACTOR MOUNTED MOWER

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Challenges

SEASONAL CHALLENGES

–WET SEASON (OCTOBER THROUGH MAY)

- Conduct the work in dry weather when the pond is accessible (ideally the summer)

–NESTING BIRD SEASON (FEBRUARY THROUGH SEPTEMBER)

- Migratory Bird Treaty Act protects nesting birds

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Challenges

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Challenges

DECEMBER 2016

FEBRUARY 2016

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Challenges

MARCH 2017

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Schedule

- Finalize Supplemental Work Plan – Early Summer 2017
- Remedial Investigation Field Work – Summer 2017
- Draft Remedial Investigation Report – Spring 2018

UX0-3 Dredge Pond 3E and Northern Marine Corps Firing Range – Presentation Topics

- Site Location and Description
- Remedial Investigation Objectives
- Remedial Investigation Approach
- Delays and Overcoming Project Challenges
- Schedule

Attachment 2. Building 84/84A Update Investigation Area D1.3-Central Presentation

Building 84/84A Update
Investigation Area D1.3-Central

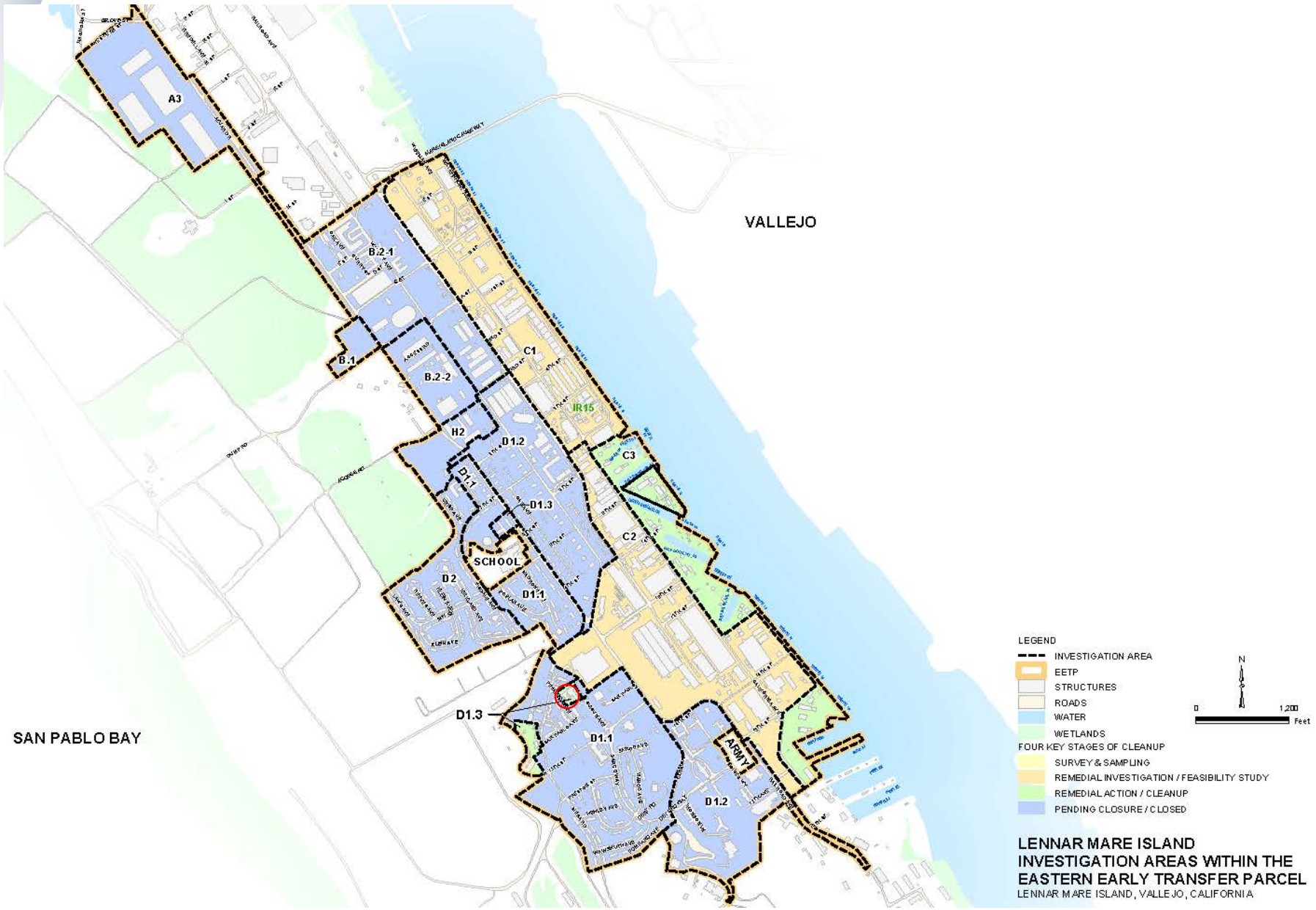
Presented to
Mare Island Restoration Advisory Board

March 30, 2017

Agenda

- **B 84/84A Setting**
- **Background**
- **B84/84A – Building Materials Sampling**
- **Path Forward**

Building 84/84A Setting



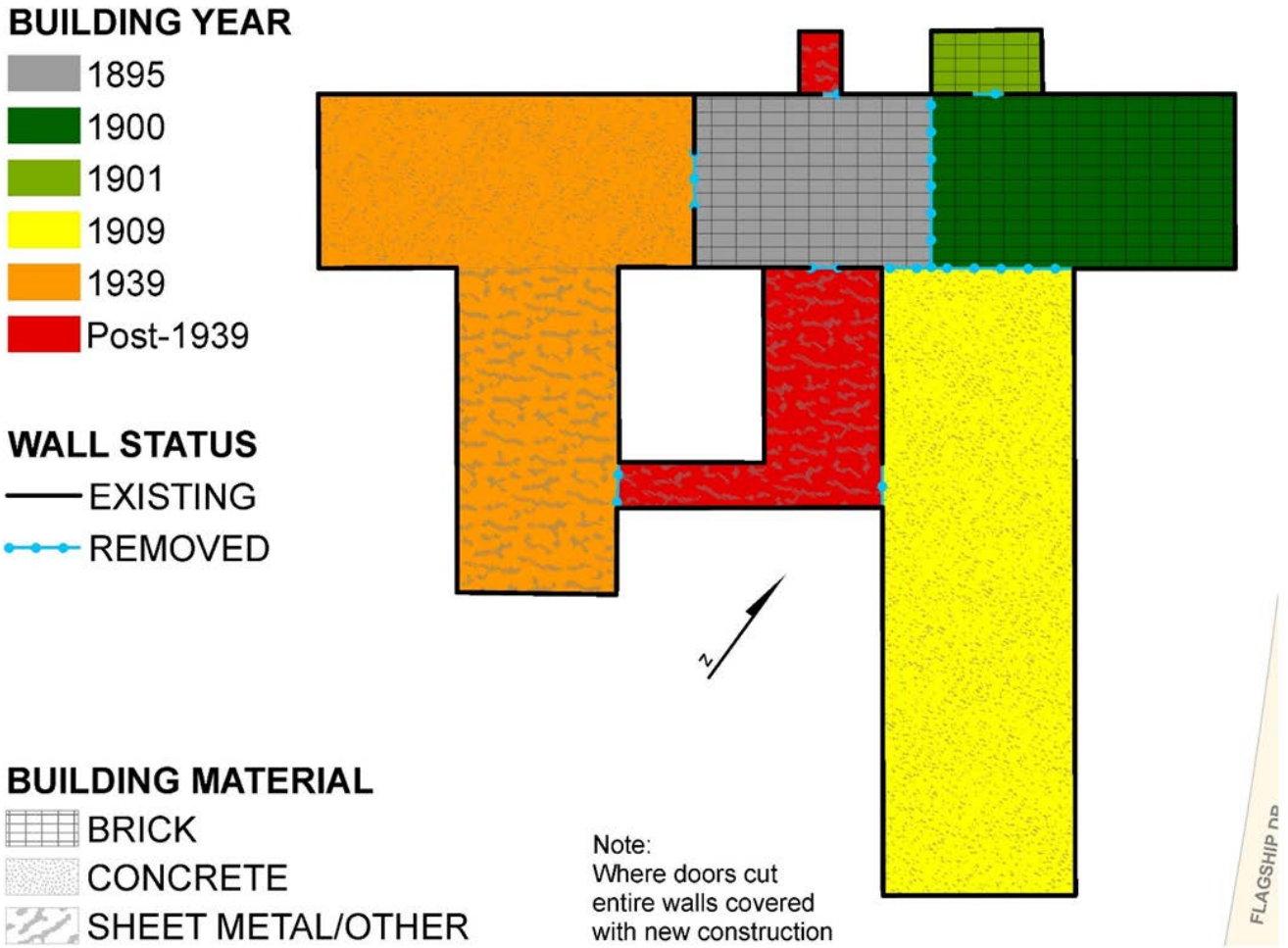
Building 84/84A Setting

Building 84/84A Setting

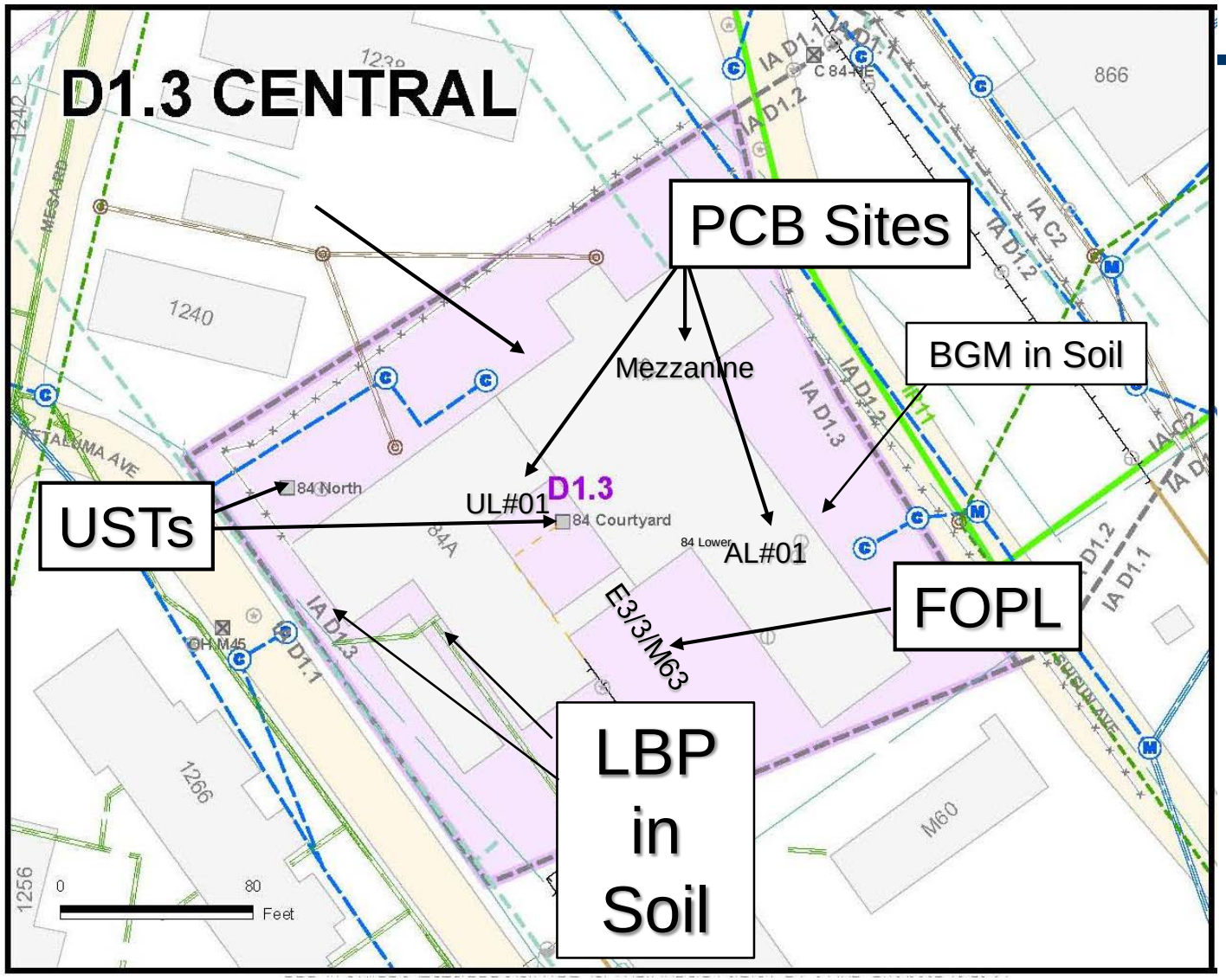
Background

- **Building 84 (B84) was the Navy Brig. The brig was first built in 1895 with later additions in 1900 and 1901.**
- **Building 84A (B84A) was added on to Building 84 in 1909, 1939 and later additions.**
- **Building 84 is brick masonry, with stone sills and lintels. Building 84A is constructed of poured concrete.**
- **Building 84 and the adjoining Building 84A are identified on the Historic Disposition Map as Notable Resources to be retained. Building 84 and Building 84A, and the general area in which they are located, are designated for residential reuse.**

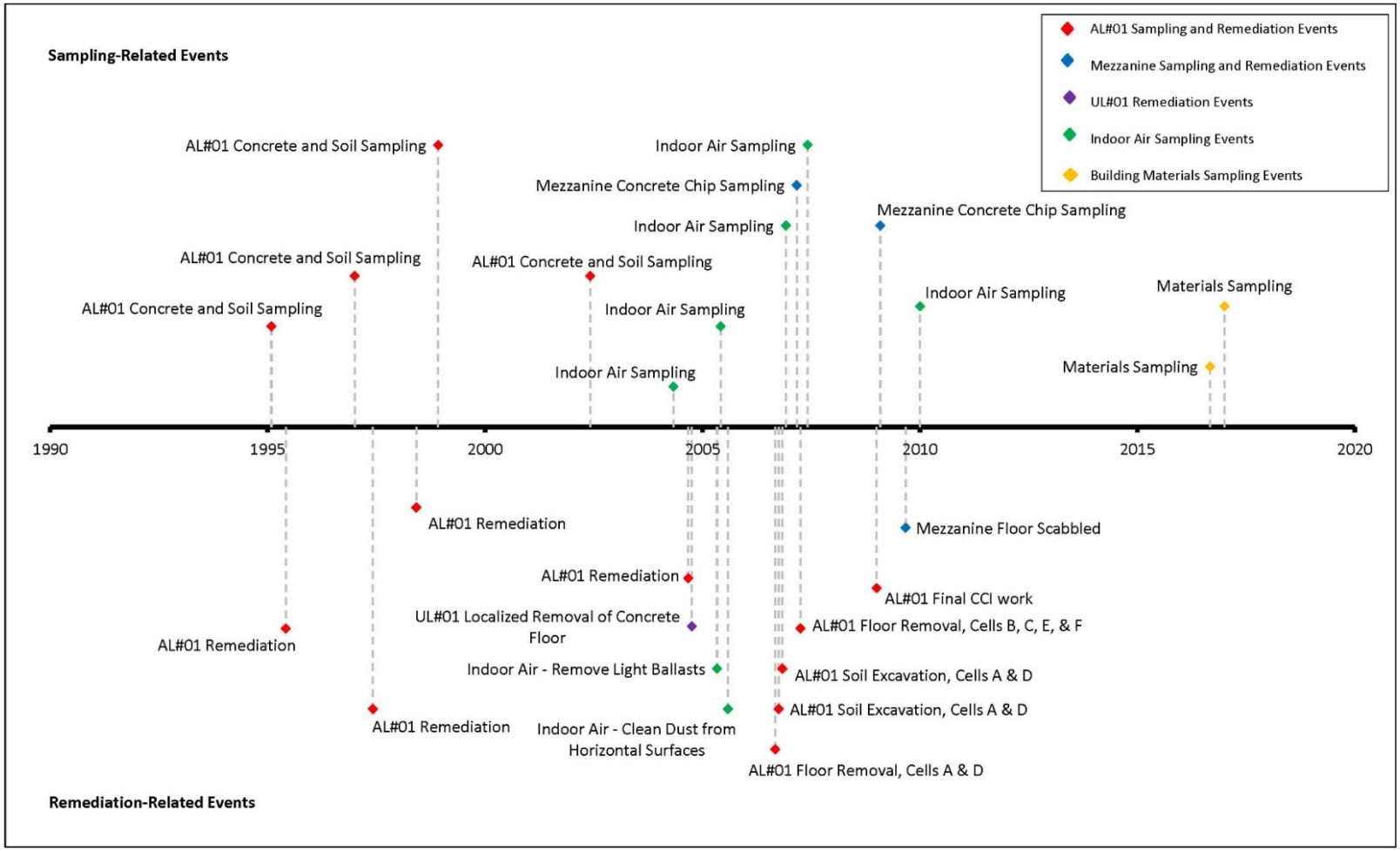
Background


BUILDING YEAR
1895
1900
1901
1909
1939
Post-1939
WALL STATUS
EXISTING
REMOVED
BUILDING MATERIAL
BRICK
CONCRETE
SHEET METAL/OTHER
Note:
Where doors cut
entire walls covered
with new construction
N

Main Features and Environmental Sites, Building 84/84A



Background


Sampling-Related Events
AL#01 Sampling and Remediation Events
Mezzanine Sampling and Remediation Events
UL#01 Remediation Events
Indoor Air Sampling Events
Building Materials Sampling Events
AL#01 Concrete and Soil Sampling
Indoor Air Sampling
Mezzanine Concrete Chip Sampling
Indoor Air Sampling
Mezzanine Concrete Chip Sampling
AL#01 Concrete and Soil Sampling
AL#01 Concrete and Soil Sampling
AL#01 Concrete and Soil Sampling
Indoor Air Sampling
Indoor Air Sampling
Materials Sampling
Indoor Air Sampling
Materials Sampling
1990
1995
2000
2005
2010
2015
2020
AL#01 Remediation
Mezzanine Floor Scabbled
AL#01 Remediation
AL#01 Final CCI work
UL#01 Localized Removal of Concrete Floor
AL#01 Remediation
AL#01 Floor Removal, Cells B, C, E, & F
Indoor Air - Remove Light Ballasts
AL#01 Soil Excavation, Cells A & D
AL#01 Remediation
AL#01 Soil Excavation, Cells A & D
Indoor Air - Clean Dust from Horizontal Surfaces
AL#01 Floor Removal, Cells A & D
Remediation-Related Events

Background
Indoor Air Sampling

Sampling Date	Results (Total PCBs)	Notes
5/11/2004	Indoor Samples: 21 to 69 ng/m^3 Outdoor Samples: <0.3 ng/m^3	Sampling occurred following remediation of floor to <0.22 mg/kg; four interior samples and 2 outdoor background samples.
5/23/2004	108 ng/m^3	Sampling occurred following removal of light ballasts and cleaning of horizontal surfaces.
12/13/2006	91 to 139 ng/m^3	Sampling occurred following additional removal of concrete and soil in far northern and southern portions of building floor.
6/6/2007	124 to 135 ng/m^3	Sampling occurred following removal of remaining portions of building floor.
1/11/2010	47 to 52 ng/m^3	Sampling occurred following remedial actions at mezzanine site.

- **PCBs in Indoor Air, Cleanup Standards (May, 2016): Unrestricted Use: 4.9 ng/m3 Commercial/Industrial: 21 ng/m3**
- **PCBs have been persistent in indoor air. Following all remediation events, concentrations in indoor air do not meet DTSC numeric standards for residential or commercial reuse.**

Background

- **Residual PCB concentrations in solid media at the PCB Site Building 84 AL#01, Building 84 Mezzanine, and PCB Site Building 84A UL#01 are below residential and commercial/industrial screening levels.**
- **Using data collected from 2004 through 2010, calculated risk for PCBs in indoor air for a residential scenario ranges from 1×10^{-5} to 4×10^{-5} .**
- **Using data collected from 2004 through 2010, calculated risk for PCBs in indoor air for a commercial/industrial scenario ranges from 2×10^{-6} to 7×10^{-6} .**

Background

- **On May 21, 2009, LMI and DTSC attended an Architectural Heritage and Landmarks Commission (AHLC) hearing and presented the status of environmental conditions in Buildings 84 and 84A to discuss potential demolition of Buildings 84 and 84A.**
- **The City and LMI addressed potential demolition alternatives with the State Historic Preservation Office in July, 2010. As a result, LMI was directed to try to remediate the remaining conditions so the building could be approved for occupancy, or perform a full environmental review (EIR) before further consideration of demolition.**
- **Following extensive characterization, testing, analysis and remediation, regulators indicated in 2014 that, given existing levels of PCBs in indoor air, the building could not be used for residential purposes.**

Background

- On June 25, 2015, LMI submitted a Certificate of Appropriateness (COA) to the City of Vallejo (City) to consider demolition as a remedial option for B84 and B84A. A COA is required when consideration is given to demolition of any notable resource on Mare Island.
- In July, 2015, USEPA published guidance addressing PCBs in indoor air and its potential relationship to PCBs in building materials such as paint and caulk.
- On December 17, 2015, LMI presented information of B84/84A to the Architectural Heritage and Landmarks Commission (AHLC), addressing issues related to the COA, including historical, planning, construction and environmental information.
- As part of the City's COA process, DTSC was asked to comment on B84/84A conditions as part of a Notice of Preparation for a focused supplemental environmental impact report (EIR). In January, 2016, DTSC recommended sampling building materials for the possible presence of PCBs.

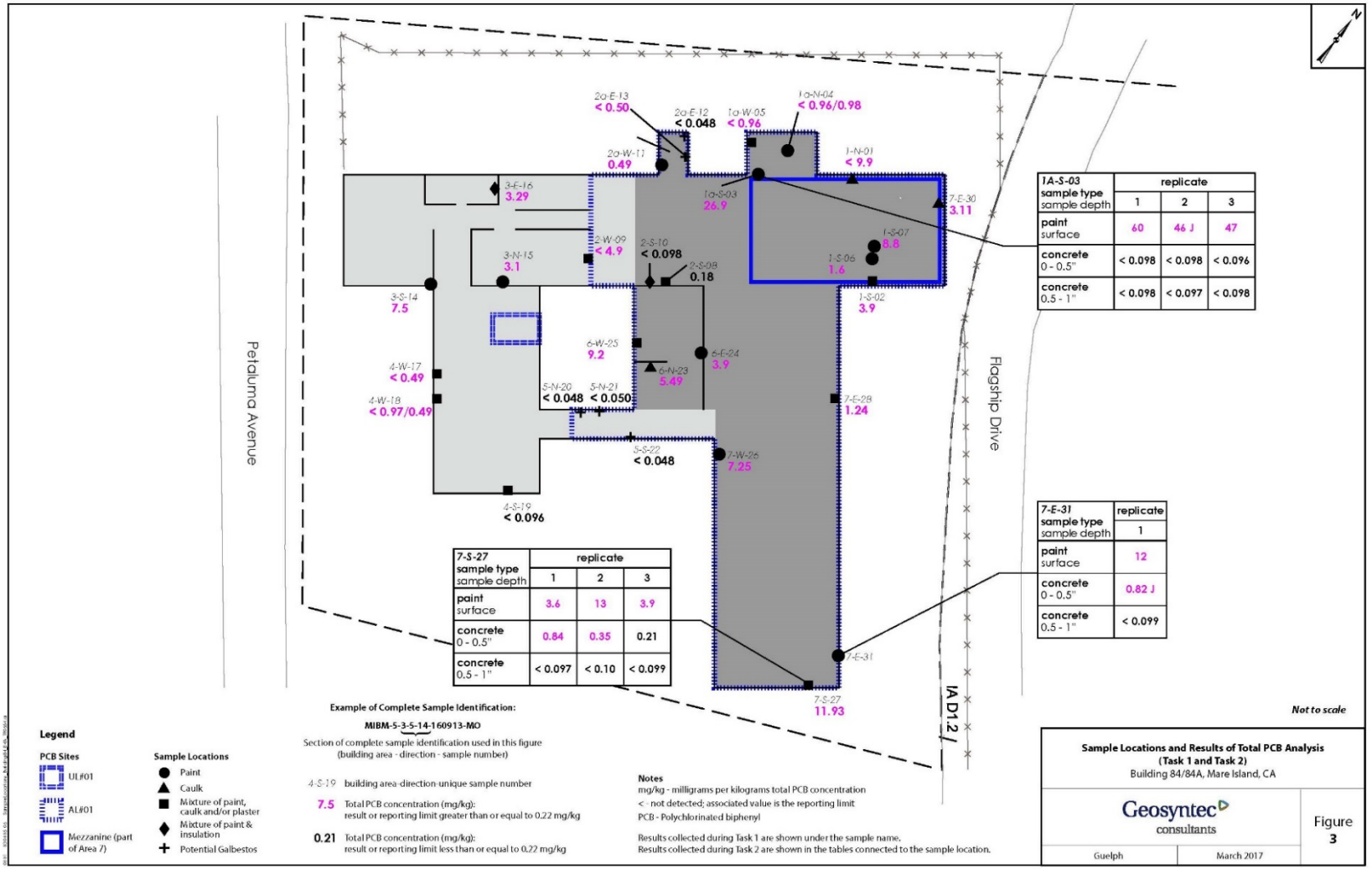
Building 84/84A – Building Materials Sampling

- **Work plan to sample building materials was approved by DTSC and USEPA in September, 2016.**
- **Two building materials sampling events have been conducted.**
  - Paint, caulk, plaster and associated insulation was sampled on September 13, 2016. PCBs were detected in excess of regulatory guidance for unrestricted reuse (0.22 mg/kg).
  - Concrete associated with building materials (associated with PCB concentrations in excess of 10 mg/kg) was sampled on January 17, 2017. Two discrete depths were sampled, 0 to 0.5 inch, and 0.5 to 1.0 inch.

Building 84/84A – Building Materials Sampling

- **Building materials were sampled from 28 locations throughout the building.**
- **PCBs were found in excess of unrestricted standards (0.22 mg/kg) throughout the building.**
- **PCB results in surface materials (paint, caulk, plaster, insulation) included concentrations ranging from non-detects (< 0.048 mg/kg) up to a maximum of 60 mg/kg.**
- **Concrete was sampled in 3 locations, and at 2 depths.**
  - PCBs were detected at the 0 to 0.5-inch depth in 2 locations, at a maximum concentration of 0.84 mg/kg.
  - PCBs were not detected in samples from the 0.5 to 1.0-inch depth.

Building84/84A – Building Materials Sampling - Results



1A-S-03 sample type / sample depth	replicate 1	2	3
paint surface	60	46 J	47
concrete 0 - 0.5"	< 0.098	< 0.098	< 0.096
concrete 0.5 - 1"	< 0.098	< 0.097	< 0.098

7-S-27 sample type / sample depth	replicate 1	2	3
paint surface	3.6	13	3.9
concrete 0 - 0.5"	0.84	0.35	0.21
concrete 0.5 - 1"	< 0.097	< 0.10	< 0.099

7-E-31 sample type / sample depth	replicate 1
paint surface	12
concrete 0 - 0.5"	0.82 J
concrete 0.5 - 1"	< 0.099

Path Forward

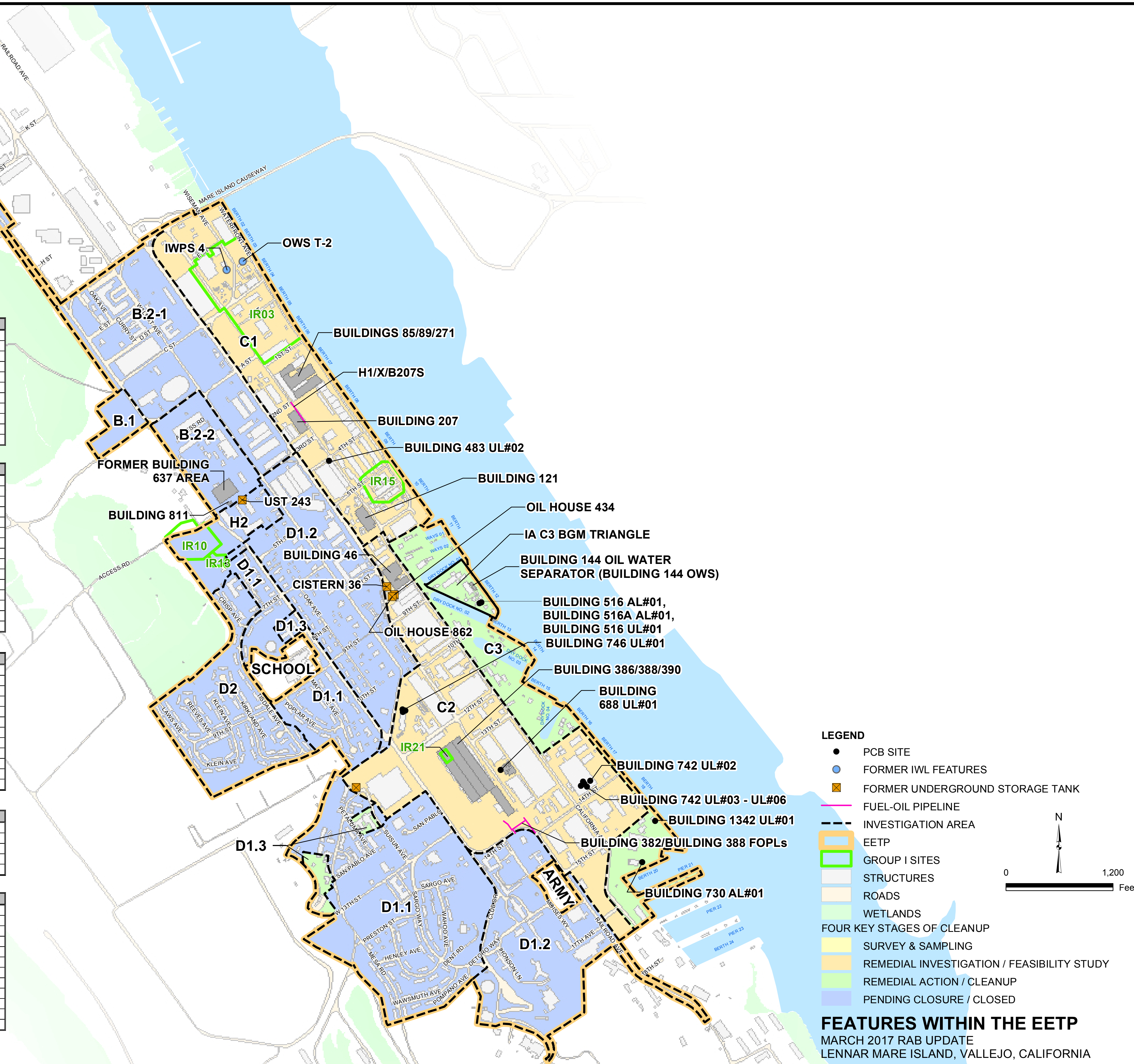
- **DTSC and USEPA are reviewing a technical memorandum describing the results of the Phase 2 sampling of building materials**
- **LMI and our consultant, Geosyntec are discussing potential options for remediation**
- **Potential remediation options will be evaluated and costs and schedule estimated**
- **Verification sampling for building materials following remediation will be required in compliance with the Toxics Substances Control Act (TSCA) Subpart O requirements.**
- **No air samples will be collected until after additional remediation is conducted**
- **Potential path forward will be presented to DTSC and USEPA for review and comment**

Questions?

Acronyms and Abbreviations

- AHLC – Architectural Heritage and Landmarks Commission
- AL – Assessment Location
- B – Building
- BGM – Black Granular Material
- COA – Certificate of Appropriateness
- DTSC – Department of Toxic Substances Control
- EIR – Environmental Impact Report
- FOPL – Fuel Oil Pipeline
- LBP – Lead Based Paint
- LMI – Lennar Mare Island
- mg/kg – milligrams per kilogram
- ng/m^3 – nanograms per cubic meter
- PCBs – Polychlorinated Biphenyls
- TSCA – Toxic Substances Control Act
- UL – Unknown Location
- USEPA – United States Environmental Protection Agency
- UST – Underground Storage Tank

Attachment 3. Lennar Mare Island March 2017 RAB Update



Upcoming Documents:
IA C1 Remedial Action Plan for Public Review
Revised FOPL Segment H1/2/B85S Implementation Report and Request for Closure, IA C1
Revised Industrial Wastewater Pump Station 4 / Oil-Water Separator T-2 (IWPS4/OWS T-2) Pilot Test Implementation Report, IA C1
IA C2 Remedial Action Plan Fact Sheet
IA C2 Remedial Action Plan Initial Study
Revised Building 746A PCB Site UL#01, Site Characterization and Cleanup Action Summary Report, IA C2
Revised Building 144 Oil/Water Separator Summary Report and Request for Closure and Response to Comments, IA C3
Draft Final IA C3 Implementation Report
Groundwater Beneficial Use Exception, IA D1.3 Central
Final IA D1.3 South Implementation Report, IA D1.3-South
2017 Annual Land Use Covenant Inspection Reports - IA B.1, IA B.2-1, IA B.2-2, IA C3 PCB Sites, IA D1.2 Commercial Area, IR10/IR13 (IA H2)

Agency Reviewed / Commented or Concurred Documents:
Revised Final DOM-6 Corrective Action Plan, IA C1 (DTSC and Water Board Comments)
First Semi-Annual 2016 Groundwater Monitoring Report, IR03, IWPS4 / OWS T-2, IA C1 (DTSC Concurrence)
First Semi-Annual 2016 Groundwater Monitoring Report, IR15 Site, IA C1 (DTSC Concurrence)
Revised Cooling Water Loop Corrective Action Plan, IA C1 (DTSC Comments and Concurrence)
Building 85/87 Soil Vapor Sampling and Analysis Work Plan, IA C1 (DTSC concurrence)
Building 121, Rooms 101 and 103, Petroleum Hydrocarbon Remedial Action Summary Report, IA C1 (Water Board Comments)
Building 151 PCB Site AL#01 Site Characterization and Cleanup Action Summary Report, IA C1 (USEPA and DTSC Concurrence)
Building 116 PCB Site UL#01 Cleanup Plan, IA C2 (DTSC Comments)
Building 746A PCB Site UL#01, Site Characterization and Cleanup Action Summary Report, IA C2 (USEPA Comments)
Final D2/4/B290W, D2/3/B382 and D2/3/B388 FOPL Remediation Implementation Report, IA C2 (Water Board Concurrence)
Building 84/84A Second Phase Sampling and Analysis Plan, IA C3 (DTSC and USEPA Concurrence)
Revised Final Building 144 Oil/Water Separator Summary Report and Request for Closure, IA C3 (Comments)
Building 1342 PCB Site UL#01 Land Use Covenant, IA C3 (Comments)
Final Building 516 AL#01, 516A AL#01 and 516 UL#01 PCB Sites Land Use Covenant, IA C3 (Comments)
Eastern Early Transfer Parcel-Wide Operations and Maintenance Plan, Second Amendment (DTSC Comments)

Documents Submitted and/or in Review/Modification:
Final DOM-6 Corrective Action Plan, IA C1
Draft Final Building 121, Rooms 101 and 103, Petroleum Hydrocarbon Remedial Action Summary Report, IA C1
Second Semi-Annual 2016 Groundwater Monitoring Report, IR03, IWPS4 / OWS T-2, IA C1
Second Semi-Annual 2016 Groundwater Monitoring Report, IR15 Site, IA C1
Revised Sanitary Sewer Sites, Data Gap Site Characterization Report and Response to Comments, IAs C1 and C2
Revised Draft for Public Review, IA C2 Remedial Action Plan, IA C2
Site Characterization and Cleanup Action Summary Report, Building 688 Pits PCB Site, IA C2
Building 746 PCB Site UL#01, Site Characterization and Cleanup Action Summary Report, IA C2
Revised Final Summary Report And Request For No Further Action Building 144, IA C3
Final Building 730 PCB Site AL#01 Land Use Covenant, IA C3
Black Granular Material Triangle, Revised Final Land Use Covenant, IA C3
Black Granular Material Triangle, Revised Final Operation and Maintenance Plan, IA C3

Field Work Performed:
Building 85/87 Soil Vapor Sampling and Analysis Work Plan, IA C1 (Field Mobilization / Utility Clearance)
UST M57 Corrective Action Plan Groundwater Monitoring Event, Building 866 Area, IA C2 (Post-Remediation Monitoring)
Building 688 PCB Site UL#01, IA C2 (Additional Characterization)
Building 742 PCB Site UL#02, IA C2 (Continuation of Remediation)
Building 84/84A Second Phase Sampling and Analysis Plan Implementation, IA D1.3 (Characterization)

Upcoming Field Work:
Building 87 PCB Site UL#01, IA C1 (Continuation of Remediation)
Building 91 PCB Site UL#01, IA C1 (Continuation of Remediation)
Buildings 85/87/271 Soil Vapor Sampling and Analysis Plan Implementation, IA C1 (Soil Vapor Sampling)
DOM-6 Corrective Action Plan, IA C1 (Initiation of Remediation)
IR15 Site, IA C1 Interim Groundwater Post-Remediation Performance Monitoring (Continuation of Remediation)
Cooling Water Loop Corrective Action Plan Implementation, IA C1 (Initiation of Remediation)
FOPL Segment H1/X/B207S, Petroleum Corrective Action Plan Implementation, IA C1 (Initiation of Remediation)
Oil Houses 434 and 862 and Cistern 36 Corrective Action Plan Implementation, IA C2 (Initiation of Remediation)
UST M57 Groundwater Monitoring Event, IA C2 (Continuation of Groundwater Monitoring)
Building 688 PCB Site UL#01, IA C2 (Continuation of Remediation)
Building 746A UL#01 PCB Site Remediation, IA C2 (Continuation of Remediation)
Building 742 UL#02 PCB Site Remediation, IA C2 (Continuation of Remediation)

FEATURES WITHIN THE EETP

MARCH 2017 RAB UPDATE
LENNAR MARE ISLAND, VALLEJO, CALIFORNIA

REMEDY ENGINEERING, INC.

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Attachment 4. Navy Monthly Progress Report

Navy Monthly Progress Report

Former Mare Island Naval Shipyard

March 30, 2017

USS *Tang* (SS-306), Mare Island, August 1943

1.0 INTRODUCTION

The Department of the Navy (Navy) prepared this monthly progress report (MPR) to discuss environmental cleanup at the former Mare Island Naval Shipyard (MINS) in Vallejo, California. This MPR does not discuss cleanup work by the City of Vallejo or its developers, Lennar Mare Island and Weston Solutions, through the Navy's Environmental Services Cooperative Agreement (ESCA). The work completed through those agreements this month is reported separately. This MPR discusses progress made during the reporting period from February 24, 2017 through March 30, 2017. The information provided in this report includes updates to fieldwork and removal actions, document submittals, the progress of regulatory reviews, issues associated with Navy environmental programs, and Base Realignment and Closure (BRAC) Cleanup Team (BCT) and Restoration Advisory Board (RAB) meetings.

2.0 FIELDWORK, REMOVAL ACTIONS AND UPCOMING EVENTS

During the month of March 2017 the Navy performed fieldwork at Installation Restoration Site 17 (IR17) and Building 503 Area, and Solid Waste Management Unit (SWMU) 78 and Building 505 Site.

IR17 and Building 503 Area

The Navy continues to conduct remedial action fieldwork in the IR17 and Building 503 Area. Backfill completion and asphalt paving operations at the southeast corner of Azuar Drive and J Street have been delayed on account of saturated soil conditions and will be resumed after an extended period of dry weather. The closure of J Street between Walnut Avenue and Azuar Drive will remain in place until the work is complete.

Backfill and compaction at chlorinated solvent area at IR17 and Building 503 Area

SWMU 78 and Building 505 Site

Navy soil investigation work at the SWMU 78 and Building 505 Site on the north end of Mare Island has been delayed on account of rain and standing water. The Navy will excavate approximately 4,000 cubic yards of soil mixed with debris (concrete and masonry rubble, pipe, wood) from the site and collect soil samples, to investigate the soil below for contamination. The investigation work is on hold until drier conditions persist.

3.0 DOCUMENT SUBMITTALS AND PROGRESS OF REGULATORY REVIEW

The Navy submitted the following documents during the reporting period:

- Final Polychlorinated Biphenyl (PCB) Site Closure Report for Building A71 in Investigation Area F1
- Final PCB Site Closure Report for Building A142 in Investigation Area F1
- Draft Land Use Control Remedial Design, IR17 and Building 503 Area
- Draft Work Plan for Remedial Action - Soil Gas Monitoring at IR17 and Building 503 Area
- Final Environmental Protection Plan, Remedial Investigation at UXO 3 - Dredge Pond 3E and Northern Marine Corps Firing Range

The Navy received comments or concurrence from regulatory agencies on the following documents during the reporting period:

- Comments received from the Department of Toxic Substances Control (DTSC) on the Draft Remedial Investigation and Radiological Scoping Survey Report, Paint Waste Area
- Comments received from the California Department of Public Health on the Final Status Survey of Debris Disposal Area Near Dike 14
- Comments received from the DTSC on the Draft Final Work Plan for South Shore Area (Unexploded Ordnance [UXO] 7) Shoreline Munitions Time-Critical Removal Action
- Concurrence received from the DTSC and comments received from the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) on the Draft Work Plan - As-Needed Groundwater Sampling, Soil Gas Sampling, Well Installation, and Well Abandonment
- Concurrence received from the U.S. Environmental Protection Agency (EPA) on the Draft PCB Site Closure Report for Building A142 in Investigation Area F1

4.0 REGULATORY REVIEW: YEAR-TO-DATE PROGRESS

The documents presented in the following table include only documents that address sites where the Navy remains responsible for the cleanup work.

Number of Documents Submitted by the Navy	9
Number of **DTSC** Comments Received by the Navy	5
Number of **Regional Water Board** Comments Received by the Navy	1
Number of **EPA** Comments Received by the Navy	2

BCT meetings are held regularly with the Navy, DTSC, and Regional Water Board to discuss the progress of environmental cleanup at MINS. The next BCT meeting will be held on May 25, 2017.

RAB MEETING SCHEDULE

The RAB meets the last Thursday of every other month, **unless otherwise noted in bold**. The next RAB meetings are scheduled for:

- May 25, 2017
- July 27, 2017
- September 28, 2017

Meetings begin at 7:00 p.m. and are held at:
Mare Island Conference Center
375 G Street, Vallejo, CA 94592

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